

# THE MFG MEETING

## BEST PRACTICES

**Details inside about why this conference matters  
and other tools for efficiency, effectiveness and  
excellence the NTMA way**

### Inside this issue

**THE CONFERENCE YOU CAN'T AFFORD TO MISS:**  
FIND OUT WHAT YOU'LL TAKE AWAY FROM THIS  
YEAR'S MFG MEETING AND HOW IT WILL IMPACT  
YOUR SHOP. - pp.8-10

**PLANNING FOR SUCCESS:** ASK THE RIGHT  
QUESTIONS, FIND THE RIGHT STRATEGY. - p.11

**WHAT'S IT TAKE TO BE A TOP SHOP?** LET THE  
NTMA SHOW YOU. - pp.14-15

**LEAN: FROM PRINCIPLE TO PRACTICE:**  
SEE HOW ONE MEMBER COMPANY PUT LEAN  
TO WORK. - p.25

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MANUFACTURING AMERICA'S FUTURE

# 2017 NATIONAL EVENTS AND TECHNICAL SEMINARS

February 8

Plant Managers' Roundtable, Phoenix, AZ

February 19-21

Chapter Leadership Summit, Austin, TX

March 8

Employee Management & Benefits Workshop, Chicago, IL

March 22-25

The MFG Meeting, Amelia Island, FL

April 6

How To Be A Top Shop Seminar, Cleveland, OH

April 24-26

Emerging Leaders Conference, Denver, CO

May 1-3

Legislative Conference, Washington, DC

May 8-13

European Tech Tour

May 10

Financial Managers' Roundtable, Los Angeles, CA

May 11

How To Be A Top Shop Seminar, Los Angeles, CA

May 19-21

National Robotics League Competition, California, PA

June 2017

Sales & Marketing Conference, Pittsburgh, PA

June 14

Workforce Development Roundtable, Chicago, IL

August 23

Emerging Leaders Roundtable: Financial Management for Non-Financial Managers, St. Louis, MO

August 24

How To Be A Top Shop Seminar, St. Louis, MO

September 5-7

MMS Top Shops Conference, Indianapolis, IN

September 13

Financial Managers' Roundtable, Philadelphia, PA

September 17-22

EMO, Hannover, Germany

September 26-27

PMA Sales & Marketing Summit, Milwaukee, WI

September 28

PMA Sourcing Solutions, Milwaukee, WI

October 25-27

Fall Conference, San Antonio, TX

November 9

Plant Managers' Roundtable, Detroit, MI





## A MESSAGE FROM OUR CHAIRMAN

MARK VAUGHN / NTMA CHAIRMAN

### MADE BY AMERICAN FAMILIES

Our association has 1,300 member companies spanning a country that is twice as many miles across. NTMA members' specialties are as varied as are their background, but we all possess the same common principles: a common sense of purpose, American ingenuity and dogged perseverance. We see a need, we find a way to meet that need and we won't stop until we do. These values begin at home. Our NTMA member companies were built and are comprised of America's greatest competitive manufacturing advantage- the American family.

The thing is, this is nothing new. American manufacturing has always been a crucial part of the American economy and the American culture. From colonial cottage industries, through the Industrial Revolution, then seeing us through world wars and a high-tech boom—American manufacturing has always been the backbone of our economy and who we are as a country. American families have built the businesses that have built this nation.

American manufacturing is evolving once again. After a generation that watched work outsourced, many U.S. companies are bringing jobs back to the United States. These companies represent a source of optimism and enormous potential for the future of America. As the American manufacturing families that make up the NTMA, we can capitalize on this trend in two ways:

1. Our customers need to know that their needs are met more efficiently and effectively by their “neighbors” rather than foreign organizations an ocean apart
2. We must extend the hand of hospitality – we must make doing business with our American companies the easiest and most pleasant experience available.

Ultimately, continuing this trend comes back to those family-taught American values of relentlessly working to meet a need. Many of our companies have multi generation owners, managers and skilled workers. It's our NTMA

manufacturing families that will provide not just the foundation and the sound structure, but the expanse that reaches above levels that we may not have previously even imagined.

As the Chairman, I look forward to 2017 and the optimism and enormous potential for the future of America-- THAT's a legacy worth building.

MARK VAUGHN / NTMA CHAIRMAN



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**DE ANZA COLLEGE**  
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## OPERATIONS & EDITORIAL

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Molly West, Editor

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# THE NTMA WELCOMES NEW NATIONAL ASSOCIATE MEMBER MAYFRAN



Mayfran International designs, manufactures, installs and services chip and coolant handling systems for machine tools, metal forming equipment and recycling systems, around the world. With over 70 years of working with Machine builders and other end users, there is no other manufacturer, of this type equipment, with the

breadth of experience, quality and global manufacturing capability.

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# SMART BUSINESS DECISIONS START WITH KNOWING THE FACTS

MAKE THIS THE YEAR YOU PARTICIPATE IN THE NTMA'S OPERATING COSTS AND EXECUTIVE COMPENSATION SURVEY.

NOW, EASIER THAN EVER.

BY JOHN MACKAY, MACKAY RESEARCH GROUP

*"Like most businesses, we are experiencing increases in labor costs, in costs for insurance for both liability and health care, in equipment and fuel costs, and in costs of parts and services we purchase from outside vendors."*

The result of all of these increases in costs, unfortunately, is that profits decrease.

Sound like your business? You probably aren't alone. The question, of course, is how do the cost increases you are experiencing compare with what other manufacturers are experiencing? Are these cost increases industry wide? Will the industry raise prices due to the cost increases or will competition keep prices down and profits will suffer?

The NTMA **Operating Costs and Executive Compensation** (OCEC) survey can help you answer some of these challenging questions. You will see how your costs for labor, insurance, utilities, etc. compare to other manufacturers. See how your gross margin, the difference between where you price your products and what it costs you to make the products, compares to the industry. More importantly, see how your bottom-line compares to others in the industry.

The OCEC is a benchmarking process of comparing the costs of what one precision machining shop does against what another shop does. The result is a business case for making changes in order to improve profitability.



## WHAT'S IN IT FOR YOU?

Each OCEC participant receives an individual company Financial Performance Report (FPR) analyzing your company. This report compares your financial performance to industry benchmarks and to others in the same line of business category; Tools & Dies, Molds, General Precision Machining, Aerospace Machining, Special Machines, Production Operations, and Sheet Metal Fabrication.

## SORRY, MY INFORMATION IS CONFIDENTIAL

• To guarantee that no one on the NTMA staff or in the NTMA membership ever sees another company's data, NTMA has contracted with Mackay Research Group, an independent research firm, to independently conduct this survey.

• Mackay Research Group processes 2,000 survey a year.

• Participant's data is aggregated in a way that prevents identification of any individual company's results.

• Mackay Research Group staff has been

conducting Financial Performance Surveys and Compensation Surveys for over 30 years.

• Mackay Research Group has conducted the OCEC and Wage & Fringe Benefits report for NTMA since 2002.

## IS THE FEEDBACK REALLY WORTH ANYTHING?

• "I was able to double my line of credit at the bank by using my individual Financial Performance Report to convince my banker that I was one of the high profit firms in the industry."

• "Thanks to the FPR we doubled our profit in three years."

The OCEC study provides you with the tools you need to identify industry financial performance benchmarks, to identify the best practice performance based on the top twenty-five percent of the companies in the industry, and to identify your company's strengths and weaknesses versus those industry benchmarks.

To ensure a comprehensive report, NTMA needs your participation. Be sure to send in your OCEC response by May 1.

**Just one more benefit of NTMA membership!**



# NEW NTMA GOVERNANCE & COMPLIANCE TEAM

BY DOUG DE ROSE, SECRETARY/TREASURER OF NTMA

At the Fall Conference in Charlotte, North Carolina the NTMA Board of Trustees approved changes to the bylaws that created the Governance & Compliance Team. This team, which is considered a "governance committee," is a new concept to NTMA, so I thought it made sense to provide some details about the role of the team and how it fits into NTMA's board structure.

The Governance & Compliance Team members and leader will be nominated by

the Nominating Team and elected by the Board of Trustees. It will report directly to the Board of Trustees and has the authority to review all governance-related activities of the Board.

This new team will work in conjunction with the Executive Committee to develop, update, and refine a policy manual for governance of the Association, which will include all policies recommended for good governance. It will also work to ensure that the Board of Trustees and the Executive



Committee are apprised of best practices in governance and compliance.

All amendments to the Association's Code of Regulations and the policy manual for governance will be under the purview of the Governance & Compliance Team to ensure they are implemented and appropriately communicated to the Board of Trustees, the Executive Committee and

SEE "COMPLIANCE" NEXT PAGE

# NRL AND CRAFTSMAN: ENGAGING MANUFACTURING'S NEXT GENERATION

BY BILL PADNOS, NTMA DIRECTOR OF YOUTH ENGAGEMENT

For 90 years, the Craftsman brand's unwavering dedication to quality and innovation has inspired builders, DIYers, weekend warriors and everyone in between. With over 80 product categories and 6,000 products, Craftsman tools continues to be America's most trusted tool brand. And, Craftsman Club has further inspired makers with projects, discussions and exclusive savings.

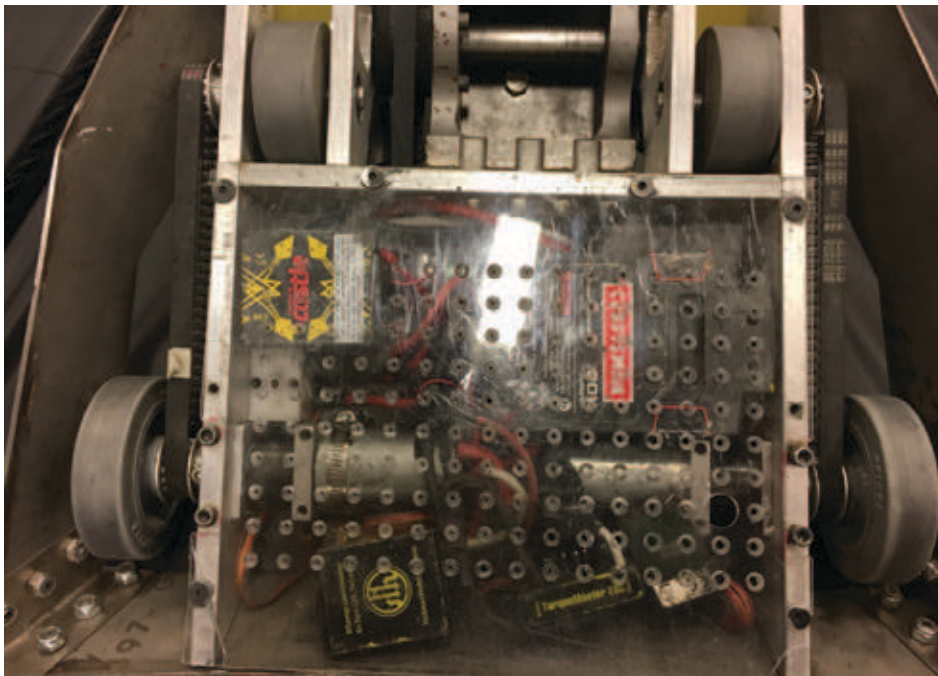
We are excited to announce that the National Robotics League (NRL) and Craftsman are creating the next legacy in helping to shape, mold and engage manufacturing's next generation. Craftsman understands the critical importance of closing the manufacturing skills gap and how the NRL program is helping to solve industry's biggest issue – recruiting a future workforce.

Craftsman recognizes that the NRL

student teams take on an awesome project in designing and building a bot to battle in a gladiator-style competition. The legions of makers in the Craftsman Club community are inspired by the work of others and the innovative Bots built by the NRL students is no exception. We appreciate Craftsman bringing this innovation to their maker community!

## INTRODUCING THE CRAFTSMAN RUMBLE

Twelve NRL teams from across the country will be selected to compete for the



opportunity to win great prizes and recognition for their school. Each of the selected teams will receive a \$2500 Craftsman Tools Grant for them to select tools, storage and more. The participating teams are also asked to create a Craftsman Club profile so they can post monthly photos and videos showing how they're using Craftsman tools in the building and repairing of their bot. Check out the Craftsman Club website (<https://club.craftsman.com/>) and socials channels starting in late February to see which NRL teams are being spotlighted!

The final component of this new partnership is a special competition that will take place at the NRL 2017 National Competition on Friday, May 19 at the California University of Pennsylvania. At the conclusion of the first round of the NRL competition, we will be holding the **CRAFTSMAN RUMBLE**. The 12 teams that received the Craftsman Tool Grant will compete in one of two rumble matches with six bots in each. The winner of those rumbles will then battle for a **\$5000 Craftsman Tools Grant**.

More information on how to view the **CRAFTSMAN RUMBLE** and the entire NRL 2017 National Competition will be included in future NTMA E-Trends newsletters. For more information about the NRL program, visit [www.gonrl.org](http://www.gonrl.org). If you are interested joining the Craftsman Club, go to <https://club.craftsman.com/>.



## "COMPLIANCE" CONTINUED

employees of the Association. Additionally, the team will make sure all new trustees receive proper orientation that will familiarize them with the Code of Regulations and the policy manual for governance of the Association.

Overall, the Governance & Compliance Team is an adjunct to the Board—it is an oversight committee and not meant as a “watchdog” or an Executive Committee substitute which will operate with complete

transparency. The Team will create an outline of minimum requirements to governance and compliance of the Association with the input of the Executive Committee, the Executive Committee, standing teams and the staff. The team will make recommendations to the Board for appropriate actions by the Board if it believes standards are not being met.





# THE MFG MEETING 2017 - MANUFACTURING FOR GROWTH

WHERE MANUFACTURING AND BUSINESS LEADERSHIP CONVERGE

You're invited to join NTMA and AMT (The Association for Manufacturing Technology), in Amelia Island, Florida for this fantastic opportunity to network, learn and grow your business.

Hundreds of manufacturing leaders attend The MFG Meeting each year "to gain a deeper understanding of the forces transforming manufacturing – from the digital factory and cybersecurity to economic and global market trends." Bring your ideas, your enthusiasm and your notebook—this is a conference unlike any other. MFG attendees will hear from entrepreneurs, technologists, business experts, and more about what the future holds for the manufacturing industry. The lessons you take from this

file speakers, you'll also gain valuable insight from networking with hundreds of your peers and sharing best practices for manufacturing businesses in 2017 and beyond.



this four-day event will inspire and motivate you to lead your organization to the next level with courage, clarity and wisdom.

Keynote speakers include tech entrepreneur Josh Linkner, Philadelphia Eagles long snapper Jon Dorenbos and AMT President Douglas K. Woods. Linkner will discuss how to unleash creativity to maximize the full potential of organizations and people. Dorenbos will share his story of overcoming adversity and the power of teamwork, perseverance, and accountability to strengthen leadership style and business. Woods will present an overview of the latest competitive technologies transforming manufacturing.

Also featured will be Kirk Rogers, technology leader of GE's Center for Additive Technology Advancement, discussing the future of additive manufacturing, and an economic outlook from John Walker of Oxford Economics.

While there is a full agenda of high pro-

## WONDERING WHO SHOULD ATTEND?

This conference is geared toward senior leadership, executives, vice presidents, senior sales directors, and emerging leaders as well as manufacturing technology's builders, distributors and end users. The MFG Meeting is about emerging technology trends, market forecasts, and inspiring you to maximize your potential and your company's potential.

## WONDERING WHY YOU SHOULD ATTEND?

The MFG Meeting is a great place to network and meet your manufacturing colleagues from across the nation. You'll share ideas and insights. You'll learn about challenges and opportunities in today's manufacturing industry. You'll hear from the experts. You'll leave energized and ready to lead.

This year's MFG Meeting will be held March 22 - 25, 2017 at the Omni Amelia Island Plantation, Amelia Island, Florida. For more complete details, an agenda and registration visit The MFG Meeting website at: [www.themfgmeeting.com](http://www.themfgmeeting.com).

source: [themfgmeeting.com](http://themfgmeeting.com)



## DO YOU PLAN TO ATTEND THE MFG MEETING? IF YOU DON'T, YOU SHOULD.

*Here's what our members are saying:*

**"MFG GIVES NTMA MEMBERS THE OPPORTUNITY TO RUB ELBOWS WITH OUR MACHINE TOOL AND SUPPORT EQUIPMENT SUPPLIERS AND THEIR UPPER MANAGEMENT, ON A ONE ON ONE BASIS. YOU DON'T GET THAT AT IMTS. THROUGH THE COLLABORATION OF THE NTMA AND AMT IN THE EVENT, WE GET A LARGER VENUE WITH BETTER, HIGH CALIBER SPEAKERS AND MORE DIVERSE LEARNING OPPORTUNITIES. FOR OUR COMPANY, THIS IS A "MUST ATTEND" EVENT."**

**BOB MOSEY, PRESIDENT**  
Moseys Production Machinists  
Anaheim, CA

**"MFG GIVES NTMA MEMBERS THE OPPORTUNITY TO RUB ELBOWS WITH OUR MACHINE TOOL AND SUPPORT EQUIPMENT SUPPLIERS AND THEIR UPPER MANAGEMENT, ON A ONE ON ONE BASIS. YOU DON'T GET THAT AT IMTS. THROUGH THE COLLABORATION OF THE NTMA AND AMT IN THE EVENT, WE GET A LARGER VENUE WITH BETTER, HIGH CALIBER SPEAKERS AND MORE DIVERSE LEARNING OPPORTUNITIES. FOR OUR COMPANY, THIS IS A "MUST ATTEND" EVENT."**

**BEN BELZER, PRESIDENT & COO**  
TCI Precision Metals  
Gardena, CA



## ABOUT THE SPEAKERS



**JOSH LINKER, FOUNDING PARTNER, DETROIT VENTURE PARTNERS**

***INNOVATION & THE FUTURE OF MANUFACTURING***

Josh has seen thousands of companies loaded with creative buzz and big ideas. How is it that some harness their imagination to create game-changing drivers of growth and innovation while others miss the mark? The answer: The best companies have a systematic process to focus their team's creativity into practical outputs, something Josh discovered by founding and building companies that sold collectively for over \$200 million. As a professional-level jazz guitarist, Josh blends the improvisational qualities of a jazz ensemble with bleeding-edge business savvy to bring a completely fresh perspective on unleashing creativity in the organization. His inspiring presentation delivers practical tools that can be used immediately to increase creative output and deliver bottom-line results.



**LAURIE HARBOUR, PRESIDENT AND CEO, HARBOUR RESULTS INC.**

***CONTRACT MACHINE SHOP MARKET & OIL INDUSTRY***

In this session attendees will gain an understanding of key trends impacting the manufacturing industry and what the future holds for machining and automation industries. She will shed light on how contract machining and additive manufacturing may influence future business models as well as the current state and future forecast of the oil and gas industry. Participants will leave the session equipped with data and information that will help them better run their business.



**JON DORENBOS, LONG SNAPPER - PHILADELPHIA EAGLES, TELEVISION PERSONALITY**

***LIVE IN VISION, NOT IN CIRCUMSTANCE***

In this truly one-of-a-kind presentation, Jon will share his amazing story of overcoming adversity and ways for you to embrace the power of teamwork, perseverance, and accountability to strengthen your leadership style and business.

### ATTENDEES WILL ALSO HEAR FROM

**JIM CARR, OWNER AND PRESIDENT, CARR MACHINE & TOOL, INC.**

Jim is dedicated to the advanced manufacturing industry. He leads CARR Machine & Tool, Inc., a second-generation, high-precision CNC machine shop; cohosts Making Chips, a podcast for manufacturing leaders; promotes high school and post-secondary programs that prepare students for the manufacturing workforce; and is involved with several organizations that advocate for the manufacturing community. He currently serves as chairman of the board for the Technology and Manufacturing Association (TMA).

**KIRK ROGERS, TECHNOLOGY LEADER, ADDITIVE MANUFACTURING, GE – ELECTRICAL/ELECTRONIC MANUFACTURING**

Kirk has 20 years of experience in materials processing to develop highly effective solutions to manufacturing problems. He has designed manufacturing processes, improvements and simplifications; high-temperature processing; net shape production techniques; powder technology; and refractory metals. In addition, he develops and implements technology strategy; identifies, investigates and applies new process methodologies and inspection techniques; analyzes business opportunities; and develops intellectual property strategy and manufacturing process improvement.

**JOHN WALKER, FOUNDER, CHAIRMAN AND CHIEF ECONOMIST, OXFORD ECONOMICS**

John Walker leads Oxford's international economic analysis, forecasting and consultancy activities. With more than 30 years of experience developing strong links with economists around the world, he will offer global economic forecasts for the manufacturing industry. John also leads major consultancy projects with government departments and multinational companies from Europe and the United States on issues ranging from international capital flows to developments in the Middle East economies.

**JAMES A. WALL, EXECUTIVE DIRECTOR NATIONAL INSTITUTE FOR METALWORKING SKILLS**

Jim leads the National Institute for Metalworking Skills (NIMS), whose stakeholders are the major metalworking associations representing over 6,000 precision manufacturing companies. As executive director, Jim focuses on improving and expanding the NIMS mission to develop and maintain a globally competitive American workforce. As a former metalworking company owner, educator, and school administrator in technical education, Jim understands the many facets of precision manufacturing and its value to the success of the U.S. economy. He is committed to developing expanded partnerships with industry, educational institutions, and apprenticeship programs to build the 21st Century workforce required for sustained economic development.

**DOUGLAS WOODS, PRESIDENT, AMT - THE ASSOCIATION FOR MANUFACTURING TECHNOLOGY**

A lifelong manufacturing professional, Mr. Woods leads the Association's drive to improve sales and market access for its members, while also providing services that lower their costs. He is dedicated to sharing his passion about the world's most innovative manufacturing technology and creating a leadership position for AMT on issues that impact the industry.

## 2017 MFG MEETING GOLF TOURNAMENT



Winding along a coastal Atlantic dune ridge, the Ocean Links course provide golfers with five oceanfront golf holes. The fairways and greens are parallel to the beach of Amelia Island and meander through a unique coastal maritime hammock. Its close proximity to the ocean and the ever-changing sea breeze provide the golfer with exhilarating views and intriguing play.

### DATE & TIME

Friday, March 24  
12:00 p.m. start time

### THE COURSE

Omni Amelia Island Plantation  
Ocean Links  
Par 700 - 5,584 yards (Blue Tees)  
Slope-rating: 66.4/119



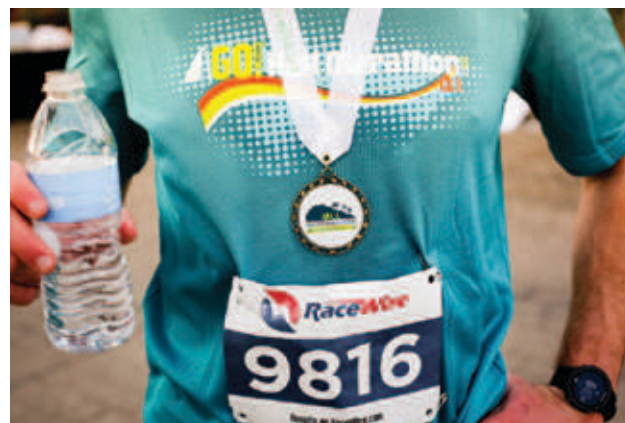
## GET ENERGIZED! RUN OR WALK IN THE MILES 4 MANUFACTURING (M4M) 5K



The MFG Meeting will again host Miles 4 Manufacturing (M4M), a 5K race, which donates all proceeds to programs benefiting the development of the future manufacturing workforce.

This exciting early morning event promises to energize you and your colleagues. The course takes you on a scenic route through the Omni Amelia Island Plantation Resort for a total of 3.1 miles. It's a great start to your day and helps out students every step of the way.

Since its debut at IMTS 2014, the M4M 5K has been run at meetings around the country and has raised more than \$45,000 to assist middle school, high school and technical college programs that promote careers in manufacturing.



THE  
**MFG**  
MEETING

MARCH 22-25, 2017 AMELIA ISLAND, FLORIDA

Manufacturing  
**for Growth**



The MFG Meeting brings together current and future leaders of the industry for a unique, vital learning and networking event. Get insight into issues ranging from new technologies to economic indicators to cultivating your workforce, while growing your professional network and sharing best practices with peers.

Register today  
to qualify for  
early bird  
rates.



[TheMFGmeeting.com](http://TheMFGmeeting.com)



# 5 COMPETITIVE STRATEGIES EVERY MACHINING BUSINESS NEEDS TO WIN

A SERIES ON STRATEGY FOR MACHINING BUSINESSES

BY DAN BAGLEY, NTMA STRATEGIST

## PART 2 – What decisions make up a strategy? What is strategy?

What a business sells, who it sells to, what price point the business earns, how wide or narrow the offering, which competitors to contest, and how the business will attack and defend from competitors in your accounts are key strategic questions that define your field of play. Of course, there are other elements that may be defining for your situation, but these illustrate that the beginning of a strategy is to make a list of the questions that need to be answered by the strategy.

Does a machining business only sell marked up machine hours or does it do more – such as coating, painting, plating or other outside process coordination, procurement of related parts and kits, or assembly and testing? How far does the firm go with services like design, CAD modeling, fixturing and work holding? Does the firm systematically reduce costs to its customers by process improvements and shared benefit? And where is the line between a manufacturing or sub manufacturing firm and a machine shop? Manufacturing is a value stream of activities, some of which our companies do, and many others which our customers or other suppliers do. Earning our place in that value stream is a conscious decision for some, and a reaction for others.

Customer needs change depending on many factors, not the least of which are customer operations management and procurement decisions about inside or outside manufacturing or even core competencies that are kept close.

The first decision of any strategy is what winning means. That is, how much? When? Many people do not set goals and justify this for lack of information. Yet, in battle information is never perfect nor always ready – but there is an understanding of the facts which are at hand, and plans are made accordingly. “Take that hill,” “occupy that section of ocean,” or “mass force along this road,” are strategic goals which can be specified. Likewise, “securing \$500,000 in new shaft turning business like what we do now,” or “develop three new \$250,000 a year aluminum milling accounts” are specific goals that can be planned for, resourced with effort,

measured, and achieved. Simplistic “we want to grow,” cannot.

To decide on some new strategy, it is helpful to take the “facts are friendly” approach. Just what is the situation? What are the facts, trends, and evidence so that the picture is clear? You wouldn’t want a “feeling” about how much fuel is in your car on a road trip, would you? Where does the firm make money, and where does it not make money? Are customers profitable? So first, a dashboard of the facts and goals can provide clarity on what decisions need to be made.

### COMPANY CASE

*Continuing from the first article, Luke is a third-generation machining company president who is confronting some harsh realities. His business is soft because his customers have implemented multi-vendor sourcing policies and relocated some sourcing to other parts of the US. He has begun rethinking what to do next to make his business healthier and more resilient to changes in customer actions. His family does not want to sell – this business is important to them, and he loves the ability to determine his own future. He has set some goals for himself based on the financial goals of his family and some of his key employees including: increasing revenue, raising profitability, and diversifying into more customers. Luke is a member of NTMA and a local charitable board, in both of which he has friends in similar business situations. They are comparing notes, becoming a “round table” to consider alternative ideas for their individual situations.*

Charts and graphs are used in business because they show trends. “Visualization” (or graphs) can communicate how fast scrap or rework are rising or falling, how many exceptions exist to average gross margin, large or small contributors to gains or losses, and other key understanding can be gained by visualizing the true dashboard of metrics. Thoughtful trend charts can show everyone what is happening, no matter their financial acumen.

Selecting the few metrics that matter is the first element of any competitive strategy. For example, you know the amount of sales required to generate a certain profitability just by working backward through results from your past couple of years. You can set a revenue goal, then refine it as you learn more.



There is no good reason not to set some goals, however arbitrary.

*“I want you to see what I see in our company trends,” Luke began one morning. He had assembled four of his key leaders that he trusts to make decisions. He had several years of P&L statements in a pile, and began to draw graphs on the board. First, he drew revenue over the last 10 years. Just a simple graph of years going across, and revenue on the vertical axis, on a chalkboard. Then he drew owners’ equity over that period. Then gross margin percentage, then EBIT dollars. Soon, the managers got the hang of it. The group graphed several key metrics manually. A 20-year employee of the company volunteered to map his earnings over the period. Then, Luke started a discussion with the group about what these metrics showed. There was some shock that the condition of the company wasn’t improving, and in fact, was declining in several key areas. Finally, Luke asked the group based on the numbers they saw and trends, if they thought the company was a good investment. Easily, the discussion turned to ideas to fix or blame about what had caused these trends or could help them. Reality was shared.*

Metrics are outcomes. Like the arrival time of a car at a destination is an outcome of the average speed, route taken, road conditions, or vehicle maintenance, business metrics are outcomes of strategy. Accepting that decisions create outcomes, then the team, its goals, its processes, innovations, and effort create outcomes like a road trip. But car journeys don’t normally have competitive teams trying to outwit other drivers (ok, shouldn’t...) but you get the point. Clearly in the history of military strategy, better plans, better fighters, better logistics, and more devoted efforts result in victories.

*“But I am not so meat-eating as all that,” you may say. “My family has been in this business now for 40 years, and I don’t understand why I can’t grow and exist by what we have been doing, and make the money we have made in the past. We don’t think about*

SEE “STRATEGIES” PAGE 11





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## "STRATEGIES" CONTINUED

competitors, we come in every day and do our best."

## DECISIONS

Through the graphs they drew, Luke's team saw declines they didn't expect to see. They wondered how competitors had been able to reduce costs of production, and win the machining they had done for years. Through 'new eyes' the team saw several areas of improvement. Taking the 5 basic strategies of machining, they set up some basic metrics for their goals to plan for. Here's their work list.

## 1. PRODUCTIVITY

– drive to reduce touch & machine time, every part, every year by fixed percentage. Evaluate machining time to quoted machining time on machine.

– Measure cost reductions on cost per part.

## 2. TOOLING

– coating, composition, machinery and geometry science to improve what you can do.

– Measure time on machine reduction, spindle speed increases, and Metal Removal rate increases

## 3. SALES

– Proposition, Pipeline, Pursuit, Persistence, & Patience

– Target a selected group of specific accounts with 1st, 2nd, and 3rd year sales targets.

## 4. ADJACENCIES

Select groups of customers to market to  
– EXTEND what you do well to other customers in the same field.

1. List them

2. Join their associations

3. Get to know them – get in their businesses.

– EXPAND what you do to other end-use markets (customers)

1. Go to some other markets to find use for what we can do in other markets (e.g. – if oil and gas pumps in past, what about ANSI or process pumps?)

– EXPORT – target customers nationally – not regionally or locally. Companies do not do local or regional business any longer.

## 5. EXPERTISE

This is the heart of differentiation, and is what we sell and how special it is. Just how common and commoditized is what we do, versus focused work we are especially good at (better than competitors)?

– Measure account profitability – evaluate what we do for a few accounts and select the best ones to reproduce by offers and sales targeting

– Focus on high value shop skills and enhancing them

– Set objectives for training and hiring to enhance skills offer

In our next installment, we will deconstruct a couple of the Basic Machining Strategies at a time. Meanwhile, what are your shops targeted metrics to improve for 2017? 2018? It's a great time to graph your results and do some planning ahead.

On the lighter side of strategy, in sports, teams win or lose from the outcomes of many elements. How good the athletes are, how well the athletes work together, how prepared the team is, and other factors. In the series ahead, we will examine each of these 5 Strategies for Machining Businesses, and look for ways to implement them to win.

Meanwhile, if you'd like to have questions addressed in the strategy column, email [dbagley@ntma.org](mailto:dbagley@ntma.org), and we'll cover them along the way.



# EMO Executive Technology Tour Hannover, Germany

SEPTEMBER 17-22, 2017

Pre-arranged booth visits to some of the world's technology leaders will take place Tuesday 9/19 - Thursday 9/21. Confirmed 2017 booths include (with more to come):



## Trip Details

- All NTMA members are invited to participate in the EMO Executive Technology Tour in Hannover, Germany this September 17-22. Attendees should plan to arrive on September 17th and depart on September 22nd. A limited number of hotel rooms will be available for check-in on September 16th. These are available on a first come first served basis.
- Hotel accommodations are not included in the administrative fee and the cost of hotel accommodations will be the responsibility of the participant. We have reserved a limited number of hotel rooms in Hannover for our members and these are available on a first come first served basis.
  - A non-refundable deposit of \$2165 for single rooms (5 nights); Or \$2390 for check-in on September 16th (6 nights)
  - A non-refundable deposit of \$2495 for double rooms (5 nights); Or \$3080 for check-in on September 16th (6 nights)
- You will be responsible for making and paying for your own air transportation. Please do not make any travel arrangements until you are confirmed for the tour.

**Registration deadline: February 24th (to guarantee hotel accommodations)**

To register or for questions, contact Brittany Belko at [bbelko@ntma.org](mailto:bbelko@ntma.org) or 216-264-2848

## PRICING INFO:

### EMO Executive Technology Tour Administrative Fee

#### \$1,395 - NTMA Member Rate

This fee includes:

- EMO show pass
- World Expo pass
- Ground transportation in Hannover
- Daily breakfast buffet
- Five group dinners
- NTMA staff tour guide for booth visits

#### \$495 - NTMA Member Spouse Rate

This fee includes:

- Five group dinners



# BENCHMARKING SURVEY IDENTIFIES BEST PRACTICES

BY DEREK KORN, EXECUTIVE EDITOR, MODERN MACHINE SHOP MAGAZINE

Machine shop owners and managers can't apply industry best practices until they identify them. *Modern Machine Shop* magazine's annual "Top Shops" benchmarking survey identifies machining- and business-related key performance indicators shared by leading U.S. machine shops, as well as the technologies, processes and strategies those successful companies apply. Therefore, benchmarking one's business using surveys such as this is in itself a best practice.

In fact, the seventh edition of this survey is now live and runs through the end of this month. The survey, which can be accessed at [survey.mmsonline.com/topshops](http://survey.mmsonline.com/topshops), is open to U.S. job shops, contract shops and captive machining operations. It is divided into four categories: machining technology, shopfloor practices, business strategies and human resources. Each survey establishes a Top Shops benchmarking group repre-



senting the top 20 percent of participating shops determined by totaling the points assigned to select business- and technology-related questions.

After the survey closes, *Modern Machine Shop* generates a series of data reports for participants, which includes an executive summary comparing responses between the Top Shops benchmarking group and the rest of the survey participants. That way, participants can see how their key performance indicators, such as net profit, spindle utilization, etc., as well as the machining technologies and applied business practices compare with industry leaders. This helps shops to better focus and prioritize their improvement efforts.

The Top Shops survey also includes an awards program. In fact, several NTMA member companies have been past "Honors Program" award winners. Winning shops are profiled in *Modern Machine Shop* and on its website. In a few cases, this exposure has resulted in shops winning work from new customers. In addition, those shops receive a prize package that includes a large Top Shops banner that can be displayed in the shop, t-shirts, hats, toolbox magnets and so on.

The only cost associated with the Top Shops survey is your time to complete it. Feel free to contact Derek Korn, *Modern Machine Shop*'s Executive Editor, at [dkorn@mmsonline.com](mailto:dkorn@mmsonline.com) if you have any questions about it.



## WHY PARTICIPATE IN A TOP SHOP SEMINAR?

Learn how to take your shop from good to great. The Top Shops Seminars sponsored by NTMA and Modern Machine Shop will help you evaluate where you are and show you a path to get to where you want to go.

The publishers of Modern Machine Shop will guide you through the process to become a Top Shop and show you the value that the designation provides in the marketplace. Industry insiders will be on hand to walk you through all the key criteria to improve your shop operations, financial management, human resources practices and your bottom line!



"RECEIVING THE TOP SHOPS AWARD IN 2013 WAS A REAL HONOR FOR JD MACHINE. IT WAS A GREAT RECOGNITION FOR THE HARD WORK OUR PEOPLE HAVE PUT INTO OUR COMPANY. IT HAS ALSO LED TO SOME NEW BUSINESS. NOT LONG AFTER RECEIVING THE AWARD, WE WERE CONTACTED BY A MAJOR DEFENSE CONTRACTOR WHO WAS LOOKING TO EXPAND THEIR SUPPLY BASE TO SUPPORT A NEW CONTRACT. THEY FOUND US THROUGH THE MMS ARTICLE ACCOMPANYING OUR AWARD AND USED THE TOP SHOPS SURVEY CRITERIA AS A BASELINE FOR SELECTING NEW SUPPLIERS. WE WERE FORTUNATE IN RECEIVING A LONG-TERM CONTRACT FROM THIS CUSTOMER ALL BECAUSE OF OUR SELECTION AS A MMS TOP SHOP"

Matt Wardle, JD Machine Corp.  
Ogden, Utah



# SAVE THE DATE

04.06.17  
Cleveland, OH



NTMA

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Learn what it takes to make your shop a Top Shop. Gardner Media and Modern Machine Shop will provide an interactive seminar on the industry standard benchmarking practice that can help elevate your business to the top of the industry. This seminar will focus on best practices to increase productivity, integrate business strategies, enhance safety and better manage human resources.

Additional topic information to include:

- Financial Management
- Human Resources
- Shop Floor Management
- Shop Technology

04.06.17 - Cleveland, OH

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## EMERGING IN ST. LOUIS: EMERGING LEADERS GROUP

BY SALLY SAFRANSKI, GREATER ST LOUIS CHAPTER NTMA



### ST. LOUIS CHAPTER

Everyone is quite familiar with industry concerns about workforce challenges – in terms of new talent acquisition, training for company growth and to accommodate retirement of current employees. The St. Louis Chapter's leadership made a 2016 decision to focus on workforce development on several levels: creating the first BotsStL (NRL), providing a free NTMA-U portal for all members, expansion of the scholarship program, selection of Chapter meeting speakers and the development of a chapter Emerging Leaders Group.

Announced at the 2016 StL/KC Joint Meeting last summer, the St. Louis Emerging Leaders group meets at quarterly Breakfast & Learns. The first of these 2 ½ hour session focused on Leading Change through Process Improvement, led by UHY Sr. Manager, Greg Herbster. The second, even more successful session in early December focused on High Impact Coaching. Coach Hank Epstein (The Quality Coach) led attendees on an exploration of how enhancing listening and coaching skills will help grow leadership roles. Early 2017 Breakfast & Learns will focus on financial management skills and on how to prepare for the next level of leadership.



These interactive, informational sessions are planned not only to inform, but to build the community of emerging leaders who will be taking the industry into its future. All early assessments are that this is a good move in the right direction and time well spent.



## TRIBUTE TO JOAN SIKORA

BY KEVIN HARTFORD, PAST PITTSBURGH CHAPTER PRESIDENT,  
ALLE-KISKI INDUSTRIES



### PITTSBURGH CHAPTER

The Pittsburgh Chapter has been a Star Chapter for the past several years. We have a hardworking board, along with many chapter programs and special events. But our chapter success is largely because we

have an outstanding chapter executive in Ed Sikora, who many of you know. However, always supporting Ed (and all of us), was Ed's wife Joan, who was a star in her own right.

Joan Sikora passed away last month after a valiant six-month battle with cancer. Sadly, she left us way too soon.

Joan took care of many of

the details that are typically taken for granted and all too often go unnoticed. And she did so with a charm that made everyone feel welcomed and special. Whether it was simply helping to host our events or helping to organize the apprenticeship graduation dinners, Joan was always there for us.

Joan spent the last 26 years working alongside her husband at their business, Jatco Machine & Tool Co., Inc., in Pittsburgh, Pennsylvania. Prior to that, she worked as a registered nurse.

Her spirit is carried on by her husband, her three children and her five grandchildren whom she loved and adored.

On a personal note my

wife, Sue, and I had the pleasure of getting to know Joan and spending time with her and Ed at NTMA events over the years. In brief, Joan was a blast! We always laughed and Joan's smile could light up the room. We truly enjoyed our time with Joan and will cherish those memories.

Joan was a nurse at heart and loved caring for others. A scholarship has been established in her honor with the Presbyterian-University Hospital Nurses' Alumnae Association. Donations can be sent to PUHNAA, 608 Quince Road, Monroeville, PA 15146 c/o Joan's Scholarship.





## CTMA EVENT GUIDES MEMBERS IN SUCCESSION PLANNING

SUBMITTED BY DEE BABKIRK



Members of the Connecticut Chapter met at a unique venue in January-- the Hartford Canoe Club. At the January 10 meeting, Pete Gioia of CBIA presented an overview of the economic climate heading into the new year. Steve Michaels of Smith Brothers Insurance, LLC spoke about succession planning. Approximately 30 attendees enjoyed networking, dinner and speakers followed by a question and answer session.



CTMA President NJ Goulet, Jr. addresses the group.



## THE NORTHWESTERN PA CHAPTER CELEBRATES WITH THEIR BLUE COLLAR BASH



The Northwestern PA Chapter celebrated its 3rd consecutive SELL OUT crowd with over 400 participants at the annual Blue Collar BASH! The Blue Collar BASH began 11 years ago to recognize and celebrate individuals working in the precision machining industry. The event features LIVE music, food, beverages, and chances to win fantastic prizes. Member companies are encouraged to buy books of 10 tickets to share with their employees. The ticket books cost \$200 and account for the majority of event ticket sales. Ticket price includes admission, food, beer or non-alcoholic beverages, and companies who order a book secure reserved tables.

Several special drawings take place during the event including scholarships for industry-related training. The NWPA NTMA Education Foundation donates two \$500 scholarships to the first two NTMA member companies picked from a hat, of course you must be present to win! A local career and

technical center donates one complementary machining course registration and one complementary welding course registration to an NTMA member company in attendance. Precision Manufacturing Institute (PMI) also donates six certificates for 24 hours of industry training.

Incredible baskets compliments of NWPA NTMA board members, plus more than 30 additional prizes from businesses in the region provided an amazing "American Auction" raffle. Each year, MSC donates a roll around tool box for a special door prize raffle. In addition, there are five special gift basket drawings based on Years of Service including a contribution of tools from Channellock and many other great prizes made possible by our sponsors. Years of Service awards include 0-5 years in the industry, 6-15 years, 16-20 years, 30+ years, and there is non-industry attendee award for guests.

The BASH Committee works tirelessly each year to come up with a different band, creative extras, high-level prizes and sponsors. On January 28, 2017, the Blue Collar BASH featured a Blues Brothers theme with

The Fabulous Booze Brothers Show Band & Revue. To sponsorship opportunities included: an annual commemorative color-changing cup (beverage sponsors), wrist band ("band" sponsors), and Blues Brother's style shades (sunglasses sponsors). A program is printed for the event which provides an opportunity to list major sponsors, members, and the opportunity to run a larger ad. To round out the theme of this year's event, proceeds from the BASH program ad sales were donated to the local Fraternal Order of Police.

Special thanks to BASH Chair, Kim Flynn, Starn Marketing Group and the committee: Jen Kliber, Lowry Supply, Andy Foyle, H&H Machine Products, Chris Minnis, Laser Tool & Plastics, Lon Sippy, Highpoint Tool, Ken & Bonnie Kuhn, Kuhn Tool & Die Co., Sandy Bates, Acutec Precision Aerospace, Diana Wilkosz, Peters' Heat Treating, and Tami Adams, NWPA NTMA.





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## MEET OUR NATIONAL ASSOCIATE: CBIZ



*an interview with with Raj K. Rajan, JD MBT, Managing Director*

### WHAT IS YOUR COMPANY SPECIALTY?

CBIZ is a professional services company that provides a comprehensive range of financial and employee business services and solutions to organizations of all sizes. With over 100 offices and thousands of associates, we are a national leader in accounting, employee benefits, valuation, retirement planning, and property & casualty insurance brokers. We are publicly traded on the New York Stock Exchange.

One of the areas we specialize in is helping companies maximize their research and development tax credit claims. This credit is both a reward and an incentive for companies to spend time and money on undertaking development efforts here in the United States. Eligibility for the credit was initially about innovation and rewarded patented development efforts but with the exodus of manufacturing work leaving the U.S., the credit has been modified as a reward/incentive for activities that many manufacturers do every day, but choose to pay employees to do them here in the U.S. rather than abroad.

### WHAT IS YOUR COMPANY HISTORY? WHEN/HOW DID YOU START?

I'm our firm's national lead in research and development tax credits and have been involved with credit claims for over 15 years. Because I have both a law degree and master's degree in corporate tax, I was brought into this specialty tax area fairly early in my career. This is because this credit requires not only understanding the applicable tax code and regulations sections, but also the ability to properly apply interpretations from court cases and IRS directives.

I'd initially started performing R&D credit studies for Fortune 500 companies. However, about 12 years ago, my area of focus changed to small and mid-market companies as many smaller companies had historically been missing out on this credit or incorrectly calculating and/or documenting their credit claim. That is because the credit calculation, rules and interpretations are quite nuanced making it difficult for those that do not spend a significant amount of time with this credit to perform the work in an optimal manner. That is why our Federal Credits and Incentives group not only help clients of my firm but

help numerous clients of other CPA firms with their client's credit claims.

I've been the primary lead on hundreds of research credit studies for companies in a variety of industries and specialties including aerospace, automotive, construction, medical device, injection molding/mold makers, software, and food manufacturing. In these engagements, I've done everything from performing the engineering interviews to the technical documentation gathering, as well as the necessary financial analysis, credit position assessments and substantiation efforts. I've also taken the lead on numerous research credit claims for taxpayers being audited by the IRS and numerous state taxing authorities.

### WHO ARE YOUR CLIENTS? WHAT TYPE OF WORK SHOULD A COMPANY CONTACT YOU ABOUT?

Because the R&D credit applies to so many industries and activities, our clients come in all shapes and sizes. Manufacturing companies do tend to be the largest segment of clients whom we help with credit claims. This is because the credit is not about being innovative or developing something new to the industry, but is more of a reward for the natural trial and error process undertaken by most manufacturing companies. It rewards job shops and injection mold companies as they develop an efficient, repeatable manufacturing process and choose to do so here in the U.S. rather than outsource the work abroad. The type of companies that we work with continues to evolve. Very recent legislative changes have improved the benefits associated with the credit starting in 2016 and have resulted in our company helping more small start-up companies. Those companies can now benefit from the credit even though they are in losses, as well as companies and owners who had previously had limited benefits due to being in Alternative Minimum Tax.

### WHAT COMPANY ACCOMPLISHMENT ARE YOU MOST PROUD OF?

I'm most proud of the success we've had working with the IRS and various state taxing authorities during audits of our claim. We are not out in the marketplace trying to make claims that are unreasonable and unsustainable hoping that they are not audited. Our goal is to provide a claim that maximizes the opportunity for our clients



as well as meets the increasing expectations of the IRS.

### WHAT SETS YOUR COMPANY APART?

A number of things sets CBIZ apart from others, including that we are a publicly traded company. However, what really sets us apart is our size and breadth and our continuing focus on working with small and mid-sized companies. Why this is important for our federal credits and incentives practice is that the focus for our group is building relationships with companies in the marketplace. We have a number of clients who are satisfied with their tax return provider and use us for our expertise in various tax consulting areas to help make sure that they are maximizing their benefits and minimizing their risk. However, because of the broad range of services we offer, should the company need payroll services or have insurance or employee benefits questions or needs, we can help them with that.

### WHAT IS YOUR COMPANY MOTTO?

Our Company motto is: "Our business is growing yours." This really speaks to what I was saying above. CBIZ wants to work with small and mid-size businesses and assist in minimizing the distractions of financial and employee issues by providing expertise in a myriad of different areas to allow those at the company to focus on what is most important to growing their company and achieving success.



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*Stuart Zarembo, President and CEO*

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# RICK AHAUS RECEIVES PRESTIGIOUS STATE HONOR FOR LEADERSHIP AND CONTRIBUTIONS TO HOOSIER HERITAGE

BY LESLIE BOLSER

Rick Ahaus, Chairman of the Board of Ahaus Tool and Engineering, Inc., was recently awarded the Sagamore of the Wabash by Governor Mike Pence of Indiana. Ahaus, a 50-year employee of the company and former President, was awarded the honor by his son, Kevin, and State Senator Jeff Raatz.

"Rick Ahaus is well deserving of the Sagamore of the Wabash, one of the highest awards the Governor of Indiana can give. Rick, a visionary before his time, saw the future of his business and that investment into the lives of people would pay off greatly. He is a pioneer of a local apprenticeship program that has changed many lives for the good over the years. Rick is a humble hard working individual who has positively impacted the community around him," Raatz said.

The Sagamore of the Wabash is an honorary award created by former Indiana Governor Ralph Gates. The term sagamore was the term used by Algonquian-speaking American Indian tribes of the northeastern United States for the tribal chiefs. The Wabash is the "State River" of Indiana and major tributary of the Ohio River. The award is an honor which the Governor of Indiana bestows, a personal tribute given to those who rendered distinguished service to the state or to the governor.

Among those who have received Sagamores have been astronauts, presidents, ambassadors, artists, musicians, and politicians.

"Receiving the Sagamore of the Wabash was totally unexpected, and I am extremely humbled. I never considered myself worthy of the award but am honored that others determined my efforts as significant accomplishments," said Ahaus.

Ahaus is a graduate of Richmond Community School and a 1966 graduate of General Motors Institute, receiving his bachelor's degree in electrical engineering. After graduation, he returned to Richmond to work for his family's business, starting as a "toolmaker in training". In 1968, he became Vice President of Sales and Engineering. In 1992, he became President of Ahaus Tool and Engineering, Inc.

During his career, Ahaus served many trade and local organizations in a leadership capacity, including City Councilman, Chairman of the Richmond Power and Light

Board, Chairman of Business of Modernization Technology's Manufacturing Assistance Services Advisory Board Richmond Community School Board of Trustees, Chairman of the Board of the Wayne County Chamber of Commerce, and Chairman of the Marketing Committee of the National Tooling and Machining Association.

Ahaus is currently retired, but still serves as the Chairman of the Board of Ahaus Tool and Engineering, Inc. In his retirement, he has found time to work passionately for a cause that will impact Richmond for generations to come. As a school board member, he recognized the importance of students reading on grade level in the third grade. He suggested that reading at grade level become the number one priority of RCS. That philosophy prompted Ahaus and Vic Jose, a retired Richmond businessman, to establish the Third Grade Academy in 2008. TGA is an intensive summer reading program designed to improve reading skills and comprehension. To provide an avenue for funding Every Child Can Read, a 501C3 organization was created.

Ahaus serves as chairman of that board. To further emphasize the importance of reading, in 2012 ECCR created the K-Ready program which encourages parents to read with their children 20 minutes every day. This program serves all Wayne County children four and younger.

Ahaus was given the honor during the company's annual Christmas dinner. Around 100 Ahaus company team members and spouses were present for the dinner, also a celebration of the company's 70 years in operation.

"Fifty years is a long time to be employed by one company. Being an employee and owner of a 70-year-old family business is something to look back on and say with



Kevin Ahaus (left) and Indiana State Senator Jeff Raatz (right) present Rick Ahaus (center) with the Sagamore of the Wabash.

pride, 'I had a part in building a business which had a positive impact on several families and our community.' I think my grandfather, father and uncles would be proud of what we collectively have accomplished," said Ahaus.

Kevin Ahaus, Rick's son and current President of Ahaus Tool and Engineering, said "This award for my dad represents our family's commitment to and our company's passion for our community. It is appropriate that he is awarded this honor during his 50th year with Ahaus and our 70th year as a company. As we look to the future, we see many more decades of our company and team members impacting our community and region."



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# BEST PRACTICES FOR ENERGY MANAGEMENT

BY ALEX PACIGA, APPI

Electricity can be a major expense for any business, especially manufacturers. Fortunately, APPI Energy, an NTMA Business Resource provider since 2001, has provided five best practices for reducing energy costs and increasing efficiency. Adopting a few of these best practices in your organization could be the difference between pouring thousands of dollars into the utilities bill, or investing it in the growth and development of your business.

## 1. LIGHTING IMPROVEMENTS

Fitting your facility with LEDs or fluorescent light bulbs can significantly reduce electricity costs, while increasing lighting output. LEDs run cool, compared to outdated incandescent light bulbs. In addition, occupancy sensors can ensure that your company isn't consuming power by lighting areas that no one is using.

## 2. DEMAND RESPONSE

Many grid system operators will award your business compensation for voluntarily reducing electricity usage during peak demand times. Ask your energy expert whether your business is eligible to take

part in these demand response programs, and you may be able to reduce your overhead dramatically.

## 3. HEATING AND COOLING

If possible, adjusting the temperature by a couple degrees can significantly lower energy costs. Additionally, some electricity utility companies offer financial incentives for upgrading HVAC systems.

## 4. ENERGY AUDIT

An energy efficiency expert can evaluate your operations and procedures, identifying ways to improve efficiencies, such as peak load scheduling and advanced metering technology.

## 5. DATA-DRIVEN PROCUREMENT

It goes without saying that a firm, fixed-price for electricity supply can shield your business from volatility and reduce costs. Getting a competitive price can involve constantly monitoring the market, comparing supplier prices, and strategically locking in to short or long-term contracts.

Over 50 NTMA members have enjoyed the benefits of APPI Energy's Member Benefit Program during its fifteen-year



partnership with the association. APPI Energy has been in operation for twenty-one years, and manages 9.3 billion kWh and 16.3 million DTH for 2,345 clients. For more information about best practices for energy management, visit [www.appienergy.com](http://www.appienergy.com).

**APPI**  
ENERGY

# OUTSOURCING YOUR PAYROLL MAY MAKE SENSE: EXPLORE YOUR OPTIONS

BY RANDY PUMPUTIS, HEARTLAND PAYROLL

Outsourcing may make sense for large businesses, but what about small to mid-size ones? How will you choose between outsourcing your organization's payroll and keeping it in-house? Is there a middle ground that gives you the best of both? It's an important decision and one that requires careful deliberation to avoid missteps that cause frustration for employees and staff—and embarrassment for employers.

## IN-HOUSE PAYROLL

According to a study conducted by The American Payroll Association, 43 percent of firms with fewer than 500 employees and half of the firms with 500-5,000 employees conduct their payroll with in-house software and resources. Why? Here are a couple of reasons:

- **More Flexibility:** Some organizations require more flexibility in their systems for tracking shift differentials, overtime, pay cycles, and other variables.



- **Long-term savings:** While initial costs for systems and staff for in-house payroll are typically higher than with outsourced solutions, in general, processing in-house will likely have a lower total cost of ownership between 2-4 years after implementation.

## OUTSOURCED PAYROLL

Like any decision to outsource, it's often a matter of allowing organizations to focus on what they do best. In the world of payroll, keeping up with constantly changing tax and labor laws is a challenge. Here are a couple of reasons to outsource:

- **Ensure compliance:** Outsourced providers are specialists and experts in the area of payroll tax and labor law.

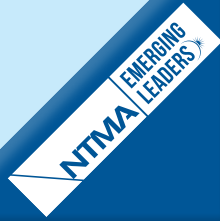
- **Reduce administrative burden:** Managing payroll in-house often requires staffing, internal processes, and software/hardware maintenance.

## WHY OUTSOURCING WORKS

We've found that, despite being reluctant to give up control of payroll, many companies decide to outsource payroll because they don't want to handle payroll taxes in-house. It is possible to achieve the best of both worlds while maintaining total control. Ask yourself these questions:

- **Accuracy and accountability:** Does the service provide greater control with the option to review and correct errors before paychecks are actually issued to employees?

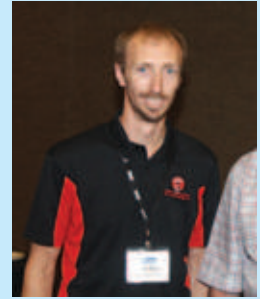
- **Service consistency:** Who will best manage the payroll schedule? Will absences and vacations affect payroll processing?



## CARRYING ON THE SECOND CENTURY OF INNOVATIVE THINKING

### ANDY BORST, PLANT MANAGER, CLAY & BAILEY

BY KELLY KASNER, NTMA EMERGING LEADERS TEAM STAFF LIAISON



Since their early days, Clay & Bailey Manufacturing has been fueled by innovative thinking. Founded in 1913 by George Clay and his brother-in-law, Harry Bailey, who had a vision to form a company that could improve upon steel tanks used by the petroleum industry. Clay and Bailey had been working to make special fittings for the tanks from Clay's garage for several years. By 1913, they were confident enough in future orders to strike out on their own—Clay & Bailey Manufacturing was born.

Andy Borst, second generation to continue the century success of Clay & Bailey, Mfg. Co., began his formal career as a machine shop supervisor in 2004. The family believes that a job well done is worth doing well in all areas, Borst is no different. He has gained experience in multiple areas of the business, including machining and quality. Borst is a strong advocate for the industry in the Kansas City area, serving as the 2016 President of the Kansas City Chapter, NTMA. Clay & Bailey has been active in the chapter for many years, "it is my privilege to represent Clay & Bailey and NTMA."

In the 1920s, Clay & Bailey purchased Morgan Foundry thus expanding the com-

pany's product lines into construction casting, service roadway and valve boxes. In the 1950s and 1960s, Clay & Bailey added an engineering department and continued to expand its product offerings. Each expansion allowed Clay & Bailey to better service the petroleum and casting industries, offering a true concept to completion environment.

In November of 2016, The Kansas City Industrial Council (KCIC) recognized Clay & Bailey Manufacturing as one of 12 winners of its annual Sustainability Awards. The KCIC Sustainability Awards recognize sustainable business practices related to Energy and Environment.

The family has been innovative in the professional development of their team to ensure the company's continued success. Clay & Bailey recently launched a mentorship program to develop its next generation of leaders, including Borst. Per their facilitator, the program is multi-faceted, "together, with the individuals involved, we identify areas for potential growth and develop learning and mentoring plans specifically targeted to their goals." Staff members participating in the mentorship program represent a wide array of Clay & Bailey departments from customer

service to human resources and sales. "We are committed to growing Clay & Bailey and believe investing in our younger staff members is the best way to ensure we remain competitive and successful for years to come," said John Patrick, Clay & Bailey President.

The company culture continues to focus on developing its talented team and producing quality products while continually looking for ways to solve industry problems. This focus on quality and innovation has allowed Clay & Bailey to thrive—through the Great Depression and beyond. As they look ahead at their next century of business, "we know that as we expand our manufacturing capacity, we will continue to be an innovative leader."

Many thanks to Borst for his leadership and commitment to positively influence others within the Clay & Bailey family, the NTMA & Emerging Leaders network and the manufacturing industry.



Clay & Bailey Mfg. Co.



• **Workforce variations:** Does your business require specialized payroll knowledge? Is it easy and cost effective to develop and maintain?

• **Flexibility:** How often do you have to make last minute changes?

• **Data location:** How will payroll data—employees' personal data including social security numbers, salary information, and banking details—be used, managed, and

stored?

• **Compliance:** How will sufficient expertise in payroll legislations and labor laws be maintained?

• **Employee self-service:** Do your employees expect self-service? Over 80 percent of employees in the US have access to payroll information through self-service (American Payroll Association survey).

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# Heartland





## NEW GOSIGER WEST HEADQUARTERS PROVIDES EXPANDED PRODUCT, TRAINING & CUSTOMER SUPPORT SERVICES



Manufacturing technology provider Gosiger, Inc. moved its West Coast headquarters from Fullerton, CA to a new location in Cypress, CA effective January 9, 2017. The new facility is approximately twice the size of the previous space to better serve customers with an expanded showroom, training area and replacement parts inventory.

According to Brad Gecowets, Gosiger's Executive Director for West Coast Operations, "With our growing service and support staff along with increasing customer demands for demonstrations, applications assistance and equipment training, we simply outgrew our former facility. At the same time, we wanted a more accessible location and

one that enables us to better serve our customers today and into the future."

Located in the former Sandvik Coromant building at 6400 Gateway Drive, Cypress CA 90630, the new 17,500 square foot Gosiger facility includes a product showroom that is four times larger to accommodate more and bigger equipment. The training space is also four times larger to provide more customer education classes and special events. Another plus is an expanded spare parts inventory utilizing an automatic retrieval system for faster customer deliveries.

Telephone and fax numbers remain the same: Phone: 714-446-7770 Fax: 714-738-6914.

For more than 95 years Gosiger, a third generation family-owned company, has provided manufacturers with innovative machine technology, robotic automation, technical service and engineering support. Headquartered in Dayton, Ohio Gosiger services customers from 15 strategically located facilities, three of which are on the West Coast: Cypress and San Jose CA, and Kent WA.



**GOSIGER**  
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## CRITERION TOOL RENEWS THEIR ISO 13485 & ISO 9001 CERTIFICATIONS

NTMA member Criterion Tool recently successfully renewed their ISO 13485 & ISO 9001 certifications with a new auditor, Smithers Quality Assessments, located in Akron, Ohio.

Criterion is a precision machine shop that specializes in CNC Milling, Turning and Swiss Turning to tolerances of +/- .0002. Criterion provides their partners in the medical, aerospace, electronic and

commercial industries with quality precision components in prototype through production quantities. The company has more than 132 years of combined technical experience in precision-machining.



# MOUNTAINSIDE MEDICAL'S LEAN JOURNEY

BY KEVIN MCGRATH, GENERAL MANAGER, TECOMET

Our Lean journey stated like many other companies; we failed in our first three attempts. It was not from a lack of drive, or lack of good people, or lack of effort. We did not focus and concentrate on the right activities. We focused on cost savings, not changing the culture.

Mountainside Medical started 11 years ago with a focus on the local medical device community in Colorado. Today we specialize in Swiss, 3,4 and 5 axis milling, wire EDM, laser welding, laser cutting, robotic assembly, metal finishing and measurement technology. We have 105 full time employees and run a 24/7 operation. At the end of 2016 Mountainside Medical was acquired by Tecomet, a large orthopedic contract manufacturer.

Essentially, the focus of Lean is reducing things that don't add value so that those things that DO add value become obvious to everyone from top level managers to the newest employees. By eliminating waste, quality improves, flow is streamlined and companies are able to reduce production costs and times for a more effective, efficient organization.



For our company, Lean 4.0 started small and our focus was on changing the culture. The first project was getting a common cleaning station in place at convenient locations around the facility. Because of the past starts and stops in the lean program, we did not announce that we were kicking off another round of Lean. We installed a cleaning board—a mounted panel with all the cleaning supplies for that cell including a floor broom, dust pan, small broom and Simple Green. The first day the board was up, the broom went missing.

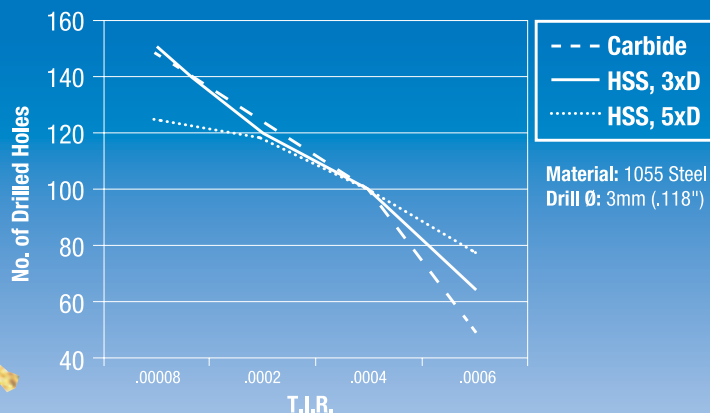
We bought an ample supply of replacements and kept moving forward. When employees can up and started asking to have boards put in their area, we knew that we started to have a bit of momentum.

Our first real Kaizen event focused on a single wire EDM machine making a drive rod for a laparoscopic instrument. We stacked the deck in our favor and picked a small team of employees that we knew would embrace and support change. We focused on making the

SEE "LEAN" PAGE 27



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## "LEAN" CONTINUED

process operator friendly. As a result we lowered the labor needed in the cell and increased productivity. The quality in the cell improved. By focusing on making the operator's job easier, we were successful at sustaining the improvements over the long term in the cell.

The next several events took the same approach, but added in at least one employee that may not have the same views on change. By this time, we had formally announced the Lean program and promoted a full time resource to execute on the strategy. Today over 75 percent of our employees have been trained and participated on a Lean or Kaizen event.

We figured out a model that would work for us over the long term. Small, three day



events with a dedicated team twice a month was the recipe for success. The focus on a short term project makes sure that items are finished and goals are met. Managing the scope of the projects allows for the teams to always finish the projects. We found that it is easier to break a long project into small manageable pieces that can finish in the three-day

time frame. The slow steady approach to process improvement has proven very successful over the last two years.

Looking back on the success of the program over the last two years, changing the culture has been our greatest accomplishment. By changing the culture we have found sustainable cost savings and process improvement. Our journey is taking our Kaisen event from a focus on 6S to now focusing on more value stream activities. We have added two part-time resources to aid the Continuous Improvement Managers team. The approach of small consistent change has added tremendous value to our organization.



## REXAIR HONORS NTMA-U GRADS



Matt Elya and Courtney Little with vice president of manufacturing Bruce Schafer.

Rexair of Cadillac, Michigan honored Matt Elya and Courtney Little at a company luncheon for their hard work and dedication for completing the NTMA-U Journeyman Precision Technician/Machinist course. The employees also completed two advanced classes working toward apprentice certification.

"This was our first time using NTMA-U and I found it to be a very good program, both in the ease of working with NTMA-U and the quality of the courses offered to the students," said Doug Barnes, Nexair tool room supervisor.

Rexair produces the Rainbow vacuum cleaner, a high end residential vacuum which is sold in more than 75 countries around the world along with all 50 states.



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