

Advanced Manufacturing Newsletter

Technology Implementation Allows US Manufacturers to Compete

A productivity paradox has come into play as US Manufacturers strive to keep pace with their offshore rivals. In the midst of the longest manufacturing recession since the Great Depression, US managers and workers face a grim trade-off. To avoid shifting production offshore, they have to make factories at home more efficient. While productivity improvements are key to survival, they also mean that fewer workers will be needed to perform the same job.

The productivity paradox means that smart survivors -- manufacturers able to preserve their US manufacturing bases are more competitive. Most are effective at leveraging the power of technology. The integration of networked computers and machine tools are used to slash costs and boost quality. Many plants have shifted from simple mass production to flexible plants that make each product to order.

No single strategy suits all survivors. Manufacturers must be willing to invest in technology such as automation. They must also pay close attention to continuous

research and development activities to make their products faster, better and cheaper while maintaining profit margins. The use of digital 3-D models of product components is proving to be a profitable strategy. Accessing digital data allows technicians to tweak designs and then get the updated computer numerical controls instructions back into the networked machine tools. Implementing changes in this manner only takes 15 to 30 minutes vs. half a day using manual methods. It is not unusual for plants using digital data to reduce the time from work order to finished part from weeks to hours. Additionally, digital designs from one facility can be zapped in an instant around the world to any other plant.

Survival isn't just a matter of smart machines. Workers have to get smarter as well, and show a willingness to learn new techniques. Employers must be willing to invest and train a versatile corps of workers. A more efficient factory, even with fewer workers is better than the alternative. There is no way to make up for lost jobs, but there is much to be said for preserving a manufacturing base.

MANT members and other manufacturers in the North Texas region can learn more about the benefits of process automation during a series of seminars. Automation Strategies for decision makers is scheduled for August 20th from 8-1. An Automation Technology Overview will be held the following week on August 27 from 8-3. Both courses are to be delivered at UTA Fort Worth's Automation & Robotics Research Institute. MANT members qualify for a 10% discount. Please call 817-272-5922 for more information. (Exerpts from Business Week, May, 5, 2003)

H/R Expert Forum

On June 10th, MANT is hosting a Human Resources Expert Forum. Staying abreast of human resource issues such as legal, tax implications, minimizing costs in hiring, training, firing, insurance, benefits, etc., help companies impact their bottom line. In a recent poll of North Texas manufacturers, human resource issues arose as a consistent area of concern.

Managing employees can be a great blessing or a major disaster. It should be profitable and enjoyable. We have assembled a panel of experts who will present valuable information on such topics as privacy in the workplace;

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Neftali Ortiz
Chairman

New Rules for Manufacturers 1 of 10

The world is quickly transforming into one large global economy. How can the USA and Texas manufacturers compete? One way is to know the rules. American manufacturers need to realize that things have changed and they must learn the new rules in order to continue to be the world's leader in manufacturing. This article is one of ten that will look at what I consider the 10 New Rules for Manufacturers .

Rule 1: Lean! Lean! Lean!

There is no way American manufacturers can compete with other global manufacturers when it comes to labor cost. Why? Because

Manufacturers Need Manufacturers

the wages other global manufacturing companies are paying their workers is about 1/8 of the wages paid to the average American worker. This makes it nearly impossible for American companies to compete on labor cost.

What can American manufacturers do? Eliminate waste and improve the quality of their products. This will help manufacturers become more competitive. American Manufacturers have to take the labor cost out of the equation by using lean programs. Improve Productivity! Manufacturers must practice continuous improvement. Management must look at how to increase production while reducing cost.

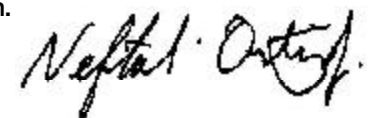
Manufacturers in the United States have been able to compete globally because of their improved technologies and production. The future will have manufacturers competing on not only existing products, but on how to make those products faster, cheaper and of

better quality. Rule number one means that manufacturers better know how to be leaner than their overseas competitor. Manufacturers in other countries will keep improving, so we need to stay ahead.

MANT has access to the resources required to implement the improvements and skills mentioned in this article. Through our partnership with the Texas Manufacturing Assistance Center, MANT members get discounted Lean Manufacturing training. Contact TMAC at 817-272-5922 and mention the newsletter.

Rule 2: Manufacturers need Manufacturers.

Next month's rule will be on how manufacturers need to support each other. I hope to see you at our next program on June 10th.




Ö Products & Services

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\$ Ignoring The Basics Is A Costly Mistake \$

- ✓ MARKETING VS SALES
- ✓ MARKETING/BUSINESS PLAN
- ✓ YOUR OBJECTIVES
- ✓ YOUR PRODUCTS & SERVICES
- Ö YOUR CUSTOMER(S)
- ✓ WHAT THOSE TARGETS WANT
- ✓ WHO ARE YOU
- ✓ WHO IS YOUR COMPETITION
- ✓ HOW DO YOU COMPETE
- ✓ YOUR DISTRIBUTION
- ✓ YOUR MARKETING BUDGET
- ✓ YOUR PROMOTION MIX
- ✓ EXECUTION
- ✓ MANAGEMENT

For the last two years surveys of local manufacturers have shown that sales and cash flow are two of the highest challenges they face each day. Existing customers, new customers, more sales, increased cash flow where does my company go from here? The best place to start is with your existing customer base. It is usually easier and less expensive to sell more to existing satisfied customers.

Last month we asked you to identify your product mix by analyzing your sales for the most profitable items in your line(s). This month we take that analysis a step further and begin analyzing your customer base.

Rank your customers by sales volume and if possible by products/services within their purchases. At the same time rank these same customers by collections to determine if adding more volume from that customer will bring more cash flow or only cause a greater problem. After you have cross referenced these two lists and weeded out the companies you don't want more business from, determine natural breaks within the clients still on the list and set a goal to move satisfied existing clients into the next level. Analyze the products/services purchased against your current products/services offering and look to see where the mix varies. Once you see where your areas of opportunity are, set a face to face meeting with the person who has the authority to make a buying decision on these products/services. Put together a structured presentation which includes history of what they are currently purchasing and presents your entire product/service mix. You want to show them your capabilities and do a little detective work. Take your best shot at what additional products/services they need. Ask some leading questions to see if there is a product/service that they need which you haven't mentioned. When you are finished, sit

back and listen to their answers. Don't fall in to the trap of assuming that a current customer doesn't need or want anymore of your products/services. In a rapidly changing business environment your next sales opportunity may be there just for the asking.

During the analysis of your current customer base you should have seen trends appear that give you a profile of the ideal target customer for your products/services. What does this customer look like? If it is a consumer, what are their demographics age, sex, income, education, etc? What are their psychographics life-style choices such as play golf, own animals, etc.? If it is a business, what are their sales, number of employees, location, products sold, etc.? Now start looking for more customers who match the profile. Who do members of your company know that look like this target customer. Start cherry picking with the warm leads that you can round up internally and then go on to sources that require more research and purchases of lists, etc. Next month we will address research and later on include how to tips for your promotion mix.

You may contact Linda at llummus@flash.net

JUNE 10 H/R Forum

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managing a foreign workforce finding, hiring and keeping good employees; the legalities of dealing with difficult employees; the costs of turnover; hiring assessment tools; insurance provisions; workforce performance tips and a host of other subjects. A question and answer period will follow.

The program location is the UTA/Fort Worth campus at 7300 Jack Newell Blvd. So. in NE Fort Worth (map available at <http://arri.uta.edu>). The time is 11:30 to 1:15 and a box lunch will be provided. Cost is \$15 for MANT members and \$20 for nonmembers. To RSVP please email admin@mant.us or call and leave a message for Allison Bowser at our administrative office 817-348-0706.

Our panel consists of Steve Freeman, SPHR with The Coeus Group, John J. Casey, VP with L J Casey and Associates and Stephen N. Wakefield, Esq. with Burford & Ryburn, LLP.

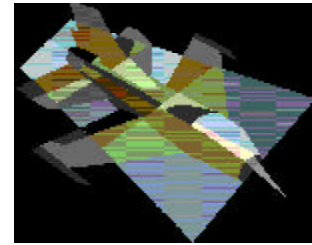
Make sure you've got the most up to date information when it comes to managing your most important resource -- your people!

Small Businesses Win Billions More in Defense Contracts

Small businesses won \$5 billion more in Defense Department contracts in fiscal 2002 than they won in fiscal 2001, the Pentagon announced in May.

The department awarded \$33.3 billion in contracts to small businesses in fiscal 2002, compared with \$28.3 billion in fiscal 2001. Small-business contracts represented 21.2 percent of the \$157.1 billion in contracts awarded to all types of businesses last year, according to the department's annual procurement report.

In fiscal 2001, small businesses received 20.8 percent of all Defense Department contracts. Defense officials attributed last year's increases to greater small-business participation in acquisitions related to aircraft, ships and commercial items.



7th Annual Martin Frost Procurement Conference July 25

Sponsored by LMCO and UTA

If you would like to find out where your company fits in the Federal, local and State supply chain, plan to attend this conference. You are sure to make contacts to assist you in marketing to the public sector. Informative workshops, exhibitors and buying agents, as well as opportunities to win 2 AA tickets are just a few of the benefits of participating. The best part?...only \$35 to attend and \$150 to exhibit. Please visit <http://arri.uta.edu/crosstimbers> for more information and to register. See you there!

MANT SUMMER MIXER

Make sure to put July 22nd at 5:30pm on your calendar for our summer mixer at the Coors Distribution Center.



Business Grant Opportunities

In 2002 the Federal government awarded more than \$1.5 billion dollars in Small Business Innovative Research (SBIR) and Small Business Technology Transfer Research (STTR) grants to small technology businesses.

On June 10th a SBIR/STTR/ATP conference will be held at the Bill Priest Institute at 1402 Corinth Street in Dallas (part of the Dallas County Community College District). Target attendees include scientists, researchers, engineers and business owners. You will get first hand information on how to successfully apply for these grant opportunities. The government provides funding for companies to design, research, develop and commercialize advanced products and services.

The conference begins at 7am and runs to 5pm. The price is \$99 and includes all materials and food. Representatives from the following agencies will present information on their grant opportunities: U.S. Dept. of Agriculture, U.S. Department of Commerce, Dept. of Defense, U.S. Dept. of Education, U.S. Dept. of Energy, U.S. Environmental Protection Agency., U.S. Dept. of Transportation, National Institute of Health, NASA, and the National Science Foundation.

To register or for more information please visit <http://www.billpriestinstitute.org/events.htm>

A note from the Vice-Chair of Membership Sarah Zink

With challenges within our businesses to work smarter instead of harder, it becomes increasingly important to choose how both our time and money is spent. Membership in the Manufacturers Association of North Texas is supportive of both. Manufacturers only pay \$150 per year for a membership, which provides up to three employees access to MANT events.

MANT has a vision to become the one-stop resource for the North Texas Manufacturing Community. Our mission is to be a conduit for Manufacturers to learning and service resources, and to provide fast answers to everyday operating questions. In addition, MANT wants to promote business-to-business networking among manufacturers.

For a complete list of events and more information please visit our website at www.mant.us or call us at 817-348-0706.

Please join us on June 10th and find out in person about the benefits of membership!

One-Stop Shopping For Iraq Contracts

The Commerce Department has created an Iraq Reconstruction Task Force to serve as a clearinghouse of information for companies wanting to learn how they can win contracts to help rebuild Iraq. For information goto:



<http://www.export.gov/iraq>

China: The Next Big Market Opportunity or the Next Big Bubble?

It was recently announced in somewhat wondrous tones that new car sales in China this past year exceeded one million. Reports in BusinessWeek and Forbes trumpet the growth of China and the size and promise of Chinese markets. Several economists have suggested that Chinese gross domestic product will once again surpass that of the U.S. by the year 2020, two hundred years after Chinese GDP was nearly one-third of the world's total. Those optimistic about China's economic future have poured the equivalent of billions of dollars in foreign investment into the country.

On the other hand, Joshua Kurlantzick, writing from Shanghai in The New Republic three weeks ago, paints another picture. His is of a China with a failed banking system with 50 percent of non-performing loans made to state-owned enterprises to satisfy political pressure; rampant corruption; false reporting of growth, beginning at the provincial level to conform with announced national goals; an economy that is propped up by foreign investment; and a country that is actually using less and less energy energy use being a reasonably reliable indicator of real growth. In short, he describes China as a house of cards that is being held up largely by a Communist regime and foreign investors who are for the most part silent about the results of their Chinese investments.

Where does the truth lie at the extremes or somewhere in between these wildly different views? For those of us who believe in free market economies, what's the best that we can hope for? A Russian-style transformation to more social and economic freedom? A collapse and rebirth of the Chinese economy would dwarf what happened in Russia. For example, it is estimated that more than half a trillion dollars would be required just to put the Chinese banking system on reasonably firm footing. Less optimistic views envision everything from a more violent transition to a pull-back to a more dogmatic form of Communism by a threatened leadership. Is it possible that the very investments flowing into China today could eventually trigger a Chinese economic meltdown?

What kind of risk-reward profile does this



represent for foreign investors? What priority would you give to investment in China in you were the CEO of a large multinational? Could you afford to stay out? Could you afford to invest heavily in fixed assets if you went in? Will this be the next great growth market for investors? Or will it implode with a force greater than that of the U.S. high-tech bust of the past few years? What do you think? Joshua Kurlantzick, Asia Minor, The New Republic, December 16, 2002, pp. 20-25.

FEDERAL GOVT. PROVIDES ADDED EXPORT SERVICES TO COMPANIES

The federal government is beefing up its export services to U.S. companies, says Commerce Secretary Don Evans. The Bush administration's Trade Promotion Coordinating Committee has been working on efforts to give companies early access to foreign projects and provide training and marketing services, says Evans. It has also improved the <http://www.export.gov> portal for export-related programs that includes information on how to export, financing and locating foreign market research. The site consolidates export information from 19 federal agencies. For a copy of the recently released 2003 National Export Strategy, go to: <http://www.ita.doc.gov/media/Publications/>



According to an Employee Benefits Research Institute survey, 24% of workers age 45 and older say that they have made a decision within the past year to postpone their planned retirement age, up from only 9% who had made that decision the previous year. The impact of the economy on savings, 401(k) plans, and expected investment returns is felt by most people. Implications for many organizations include manpower planning, attrition, medical plan costs, and financial security and education.

More information at www.thecoeusgroup.com

FREE 1/2 Day Workshop!

The TCEQ Small Business & Local Government Assistance (SBLGA) program is conducting a RCRA Record Keeping and Reporting Workshop in Austin at the MCC Center on June 17th. This workshop is for Small Quantity Generators. More information about the workshop can be obtained at:

<http://www.tnrcc.state.tx.us/exec/sbea/sblga/rcra.html>

Please feel free to contact, Scott Wiedeman at 512/239-7015 or Will Wyman at 512/239-3545 with any questions

OSHA TEAMS WITH TRADE ASSOCIATIONS

The Occupational Safety and Health Administration (OSHA) has formed alliances with the National Association of Home Builders and the Air Conditioning Contractors of America in an effort to reduce on-the-job injuries. The alliances will develop new training and education programs aimed at at-risk workers in the two industries.

SENATE CONSIDERS TAX PROVISIONS TO HELP SMALL COMPANIES

The Senate Finance Committee has adopted tax proposed aimed at helping small companies. A venture capital provision in the Jobs and Growth Tax Act of 2003 (S-2) would increase venture capital to small businesses by changing the tax code to allow tax-exempt entities, such as pension funds and university endowment funds, to invest in Small Business Investment Companies (SBIC) without incurring unrelated business taxable income. The bill also has a provision that enables small firms to expense more of the equipment they purchase by tripling the current expensing limit to \$75,000.

The Journey to Excellence Workshop Series invites MANT members and associates to select and attend any one of the following complimentary workshops. The time is 7 am to 9 am to allow for a full day at the office/plant. Abstracts available at <http://arri.uta.edu/enterprise-excellence>, click on services and Journey to Excellence. Details at 817-272-5930, Jo An Weddle. Courses at UTA/Fort Worth.

Date	Topic	Title
June 11	Cycle-Time Reduction Lean Concepts	Using Time as a Competitive Weapon
June 18	Inventory Strategies Lean Concepts	Attacking the Hidden Costs
June 25	Total Productive Maintenance Lean Concepts	Maximizing Your Resources
July 2	Cellular Manufacturing Lean Concepts	Becoming Agile

TMAC LEAN MANUFACTURING SERIES

begins in August and runs through October 2003

- Principles of Lean Manufacturing
- Principles of the Lean Office
- Value Stream Mapping
- Problem Solving Tools
- 5S Visual workplace
- Set-Up Reduction
- TPM
- Cellular flow
- Pull KanBan

Please call Lisa Baldwin at the Texas Manufacturing Assistance Center: 817-272-5922 for details and flyer. MANT members ask for your 10% discount.

Homeland security contracting expected to pick up By Molly M. Peterson, [National Journal s Technology Daily](#) Companies looking to do business with the Homeland Security Department are likely to see procurement opportunities increase next year, technology experts from industry and government said on Thursday.

I think you ll see, toward the end of [2003] and into [2004], a lot more investments happening, Jim Flyzik, who served as Tom Ridge s senior adviser for information technology in the White House Office of Homeland Security, said during a conference sponsored by the Armed Forces Communications and Electronics Association. Flyzik, a former Treasury Department chief information officer who is now a partner in a consulting firm for companies that contract with the government, said homeland security officials are using most of the department s current budget for planning purposes, such as mapping how to integrate the financial and human resources systems of the 22 component agencies.

Operation and maintenance programs are moving forward, modernization efforts in the individual entities continue to move forward, and new investments under \$500,000 are moving forward without an Investment Review Board review, Flyzik said. But he likened the new department to a holding company that has a long way to go in merging functions. So what you have going is the evolution of [turning] a



holding company into a corporation, Flyzik said. How do you turn 22 entities into one cohesive department? For companies hoping for lucrative contracts with the department, figuring out where to focus their homeland security resources is like walking through a minefield, according to Steven Carrier, vice president of Northrop Grumman s information technology division.

It s a very confusing landscape right now, he said, adding that the department is similar to a huge startup company that is still finding its way. But we see it improving. They ve probably come further than anybody thought they would, but it s still very difficult to address the department in its current state. Carrier said following the homeland security money trail also is difficult, particularly for companies looking to do business with state and local agencies receiving federal grants. But one potential focus for contractors is the Homeland Security Advanced Research Projects Agency (HSARPA), according to retired Lt. Gen. Peter Kind, who was a special adviser to Ridge in the Office of Homeland Security. Kind said HSARPA expects to release a broad agency announcement soliciting innovative ideas within a matter of weeks.

That s going to outline the [fiscal 2003] funds available ... and it s going to be written in a broad context, so your ideas could fit into that, Kind said. This is a major way to provide funding and focus and bring out the best that America has to offer ... and get it applied into the system. Flyzik said HSARPA is likely to have a nearer-term focus than the Defense Advanced Research Projects Agency (DARPA), on which it was modeled. They really want to focus on ... technologies that are going to be available in the next maybe six months to a year, as opposed to some of the traditional DARPA things, which are longer term, he said.



The Manufacturers Association of North Texas newsletter is proudly sponsored by The University of Texas at Arlington and the Texas Manufacturing Assistance Center, a component of the Automation & Robotics Research Institute
www.tmac.org - 817-272-5922 - Editor, D.M. Wallace

