

Last modified Mon., October 11, 2004 - 12:23 AM
Originally created Monday, October 11, 2004

Lean is the word in the business world

Japanese manufacturing philosophy is making a big hit on the First Coast from Ameritape to Worksource.

By **GREGORY RICHARDS**

The Times-Union

Jerry Bussell has found what he believes is the key to manufacturing success. And now he wants to share it with the rest of the city.



Five years ago, Bussell discovered lean production, a Japanese philosophy of removing wasteful actions and procedures that don't add value for the customer. He persuaded his bosses at Medtronic Xomed, a Southside manufacturer of products that treat ear, nose and throat diseases, to implement the system. The results wowed everyone involved: The system slashed production time and defect rates, saving the company tens of millions of dollars. And it made employees happier by allowing them to take charge of their work.

"I had never seen such an integrated strategy that was simple, made sense, could be well understood and that you could drive the type of results that you could," said Bussell, Medtronic Xomed's vice president of global operations. "The speed that you could get improvement without spending a lot of money was just staggering to me."

Although it is becoming the rage among some American

Jerry Bussell, the vice president of global operations for Medtronic Xomed, is a big supporter of the lean philosophy, placing signs around the company to keep employees thinking "lean." Kaizen Corner is one of those signs, as kaizen means continuous improvement. JOHN PEMBERTON/The Times-Union

businesses, most haven't made much progress with the strategy, which was developed by Toyota Motor Corp. in the 1950s. So, Bussell thought, why not help Jacksonville's businesses become "lean"? And why stop there?

Last year, with assistance from the First Coast Manufacturers Association and WorkSource, a non-profit job-training organization, the Lean Consortium was born. Although there are a dozen lean consortiums in Canada and a handful in the United States, none strive to be as far-reaching.

Besides transforming businesses, the group would like to see the theory's principles seep deep into government, schools and the culture of Jacksonville in hopes that the big payoff would be more jobs as companies are drawn to the region.

Learning lean

While in the first stages of bringing lean production to Medtronic Xomed, Bussell had some essential lean thinking terms painted on columns lining a walkway connecting two of the company's buildings. Executives would occasionally quiz workers about what they mean; right answers meant prizes like T-shirts and free lunches.



Utilizing the lean manufacturing system, assembly line stations on the floor at Dura Automotive are designed around the workers, funneling parts within reach to minimize movements and increase productivity.

JON M. FLETCHER/The Times-Union

focus group studies ways members can better organize their operations. Another monthly event is the "walk of shame," where attendees walk through a member's facility to point out processes needing improvement and to celebrate accomplishments. It also holds quarterly sessions about mapping business processes to allow companies to see inefficiencies.

To become a member, the companies have to make a three-year commitment to the consortium, and pay annual fees that range from about \$500 to \$2,000, depending on the firm's size.

The consortium works in several ways. Monthly, it holds an "Introduction to Lean" class, and a

But increasingly, the companies are starting to look to each other for guidance as to how to transform their businesses, said Amy Erickson, the consortium's facilitator.

A top lean thinking expert is advising the group. The consortium has hired David Chao, who travels from his base in Canada several times a year to visit First Coast companies.

Cindy Hildebrand, CF Machine's president, said she wouldn't have been able to begin to make her business lean without the consortium.

"I wouldn't have known where to begin," she said. "It's just been incredibly helpful having the support group."

Lasting performance

Business process reengineering. Total quality management. Taguchi methods.

Over the years, manufacturers have seen plenty of systems designed to improve operations. Each has come and gone.

Industry officials predict lean thinking has more permanence.

Art Smalley, a faculty member at the Lean Enterprise Institute, a Boston-based non-profit research and training organization, said he was "pessimistic" about lean production's future 10 years ago.

"I didn't think American management could stay attuned to anything for more than a few years," he said. Now he thinks differently. "Toyota's been doing



this since the 1950s. If they've been doing this for 50 years and nothing's displaced it, I think it'll be true for us."

Lean production's holistic approach to improving quality, cost and delivery is "timeless," Smalley said. Previous methods focused on only a portion of those needs.

About 55 percent of companies nationwide are involved in lean in some way, said David Drickhamer, an editor at trade magazine IndustryWeek. But, he said, many of those companies are just getting started or had stalled in their efforts.

The practice is much more widespread in other countries, said Chao, the Canadian lean expert. In Japan, and in Canada, for instance, there are many consortiums focused on lean, he said. In the United States, such groups are very few.

"That's probably because the U.S. mentality is very competitive," Chao said. "They don't want to share ideas and leverage with other companies. They're afraid they're going to lose their competitive advantage."

In Japan, he said, competitors share information freely because they believe it will help the entire industry. Not embracing lean quickly means great risk for companies, given heightening global competition.

"Lean is the standard now -- it is no longer an option," Chao said. "Either you become lean and use lean methods or you say goodbye to your future."

Impressive results

lean have shown spectacular results. But reaching that level is not easy, and it's an unrelenting process, say industry officials.

Medtronic Xomed, for example, one of the First Coast companies farthest along in implementing lean thinking, has used the philosophy to turbocharge its operations. The company has moved assembly areas right into the warehouse, eliminating the need to shuttle parts and finished goods all about the complex. It compressed work areas into "cells" with one worker within arms' length of another, making it easy to correct any problems. And they've given employees the authority to control how products are built, with the management staff acting as coaches.

"Who knows how to do the job better than the people who are doing it?" Bussell said. "We don't know. We don't do these things."

Medtronic Xomed's efforts have earned it two of the manufacturing industry's biggest awards: The 2002 Best Plants award from IndustryWeek and the 2003 Shingo Prize for Excellence in Manufacturing, which has been described as the "Nobel prize of manufacturing." Its success got its parent company, Medtronic Inc., a Minneapolis-based company with \$9 billion in revenue, to adopt lean.

Powered by lean processes, Toyota has become the world's second-largest automaker, behind General Motors Corp. And in its fiscal year that ended in March, it reported a profit of nearly \$11 billion -- more than General Motors, Ford Motor Co. and DaimlerChrysler Corp.'s earnings combined.

"I've never seen anybody who's really serious about implementing lean who doesn't get very positive results," said Peter Ward, chair of the management sciences department at Ohio State University.

LEAN PRODUCTION

Lean Consortium members

- **Ameritape Inc. -- specialty tape distributor**
- **Atlantic Marine Inc. -- shipyard**
- **CF Machine & Tool Inc. -- machine part manufacturer**
- **Crane Resistoflex -- hydraulic component system manufacturer**
- **Dura Automotive Systems Inc. -- automobile parking brake manufacturer**
- **Florida Custom Marble -- cultured marble products manufacturer**
- **Enkei Florida Inc. -- aluminum wheel manufacturer**
- **Goodrich Corp. -- composite and acoustical components manufacturer**
- **Jacksonville Sheriff's Office**
- **JEA -- utility**
- **Kaman Aerospace Corp. -- aircraft structural component manufacturer**
- **Medtronic Xomed -- specialized surgical product manufacturer**
- **Naval Aviation Depot -- military aircraft repair and refitting**
- **REDD Team Manufacturing -- aluminum ramp and stair manufacturer**
- **Swisher International Inc. -- cigar manufacturer**
- **Worksource -- job training agency**

Lean about Lean

Sure, cutting waste sounds easy. But doing it right -- and doing it constantly -- is a lot of work.

Among the challenges companies face when implementing lean: Getting top management to commit to it; converting staff members in middle-management jobs from bosses to coaches; and dedicating time and money to employee training.

"If you're tough enough to do it, you gain a competitive advantage," said Ward, who has done award-winning research on lean production. "Because it's hard work, it's hard to duplicate."

But the hard work required to get a company to think lean involves brain power, not brawn, Bussell said. "Part of lean is making people's jobs safe and easy. We don't want people working faster -- we just want them working steady at the right pace. If we want them to do more, then we have to improve the process."

There's also no end point, for there's always waste to trim. "It's almost like putting a brand new pair of glasses on after years and years. And all of a sudden you can see things -- you can see waste -- that you've never seen before," Bussell said.

Lean Jacksonville

The Lean Consortium's goal is to get the entire city thinking lean.

Bussell, who speaks passionately about lean, said he envisions several lean consortiums in Jacksonville. Maybe one focused on small businesses. Another on banking and yet another directed to non-profits.

Already, four companies are on a waiting list for a second consortium. Once 12 to 15 companies sign up, an additional consortium will be formed, said Erickson, the consortium's facilitator.

Eventually, Jacksonville's public schools may teach lean thinking, just as in Japan, where schoolchildren are taught the principles of teamwork and self-reliance, Bussell said. First Coast colleges would offer courses on it and it would become a fundamental part of city government. Already, JEA and the Sheriff's Office have begun implementing lean.

"It becomes part of the DNA of Jacksonville," he said. "We are the best. God, we have so much going for us in the city, such progressive leaders and people who are so dynamic. I just need to get this in the hands of some people who will run with it."

Bussell said he has casually mentioned the idea to Mayor John Peyton, John Fryer, superintendent of Duval County Public Schools, and Steven Wallace, president of Florida Community College at Jacksonville. Wallace, in particular, Bussell said, "seemed really enthusiastic about it."

"You have to plant seeds. That's what I'm trying to do -- plant these seeds."

It could be a brand for the region, just like North Carolina's Research Triangle Park and California's Silicon Valley, said Lad Daniels, president of the First Coast Manufacturers Association and a member of Jacksonville's City Council. Already, Bussell has trademarked the term "LeanJax" and registered a Web site of the same name.

Jerry Mallot, the executive vice president of the Jacksonville Regional Chamber of Commerce, said a lean Jacksonville would aid efforts to draw companies to Northeast Florida in two ways: By showing that the city is on the forefront of management techniques, and by demonstrating the preparedness of the workforce.

"It's definitely an element that makes us more attractive, and that companies appreciate and understand," said Mallot, who is the city's point person on attracting businesses.

gregory.richards@jacksonville.com, (904) 359-4649