

The lean enterprise

Many manufacturers dabble in lean, trying out small scale initiatives on the shop floor. When they see a return they think they've done it, but those who really understand lean tell Barbara Axelson about its universal application, and the commitment required to keep going

Experts assert that lean is a function of leadership. Companies must be committed. For large organizations with multiple locations, challenges include standardizing the approach as geography and cultures come into play.

Andy Carlino and Jamie Flinchbaugh, partners at Lean Learning Center in Novi, MI, serving North American clients with worldwide operations, agree that lean is about thinking, rather than tools. "Lean is about more than manufacturing," says Flinchbaugh, who explains that even a manufacturing company must perform design and maintain accounts payable and order fulfillment, so it is more than the act of manufacturing.

Senior management must understand lean and the ways to develop the culture, which will obviously require more time and commitment than quick fixes. "It's not necessary to understand every technique," says Carlino. "Start at the top, it depends on the variables – what baggage, what culture. We suggest a parallel path, one that has tools for quick returns. It's about 'show me the money' from a company's standpoint."



Once on the path, you have to stay there, too. It takes a lot of sustaining. "A fatigue sets in after you've taken a big swipe at inefficiencies in your company," says Kevin Prouty, senior director of manufacturing at New York-based Symbol Technologies, a manufacturer of wireless devices and mobile technology. A former winner of a prestigious Shingo award, Symbol implemented lean in Prouty's plant. However, he explains, "the rest of the company didn't and we lost potential benefits."

Prouty categorizes companies into those who have fully implemented lean, such as the big automakers; those trying to implement it in fits and starts; and those who haven't done anything. The latter is the majority. It takes a concerted effort.

A lean champion will confirm it's a way of running a business, rather than a project. "Companies who say 'we're already lean' — that makes them fall off the edge of lean. They say 'we don't need all these tools.' That's the biggest pitfall. If lean is done properly, it changes the company. It's a core change, like having, or not having, electricity."

Flinchbaugh agrees. "The minute you declare you've achieved lean, you're not lean! It's how you do everything, not just a workshop. "You don't 'get' lean — you'll never get there. Leaned out inventory, which significantly reduces goods, can be impacted by catastrophes such as 9/11. Companies need to know that they are now more fragile." "Organizations chase lean tools and do not get into the lean thinking," cautions Carlino. An organization may use tools like 5S or visual management and see some gain, but then may slide back. Carlino says it's somewhat like throwing a tool, like a hammer, at an organization. "Lean must first be understood. An auto mechanic with a wrench must understand the car."

Lean also includes partners and suppliers and distributors. Symbol's Prouty maintains that lean is not fully embraced by nearly enough manufacturers. "A lot of companies say it, but only use it to implement a superficial piece of their organization. You can lean isolated points of the company, but you need to change how they interconnect parts of the business. You have to look at suppliers and customers — that's the hard part, although there are some ways that you can isolate yourself from non-lean companies."

"We've done quite a bit with lean," says John Smith, senior vice president and chief operating officer at Ross Controls, a manufacturer of pneumatic valves, controls systems, and safety products for the fluid power industry. "We had realized we weren't going anywhere and, internally, we knew we'd have to change our culture and way of thinking." As an international company, top people from each country, plus corporate management (CEO, COO, CFO, legal counsel, HR, heads of sales and engineering), attended a week of training with a consulting company that came onsite and then followed that up by working with Lean Learning Center.

Describing himself as a type A personality, Smith says: "You cannot do it yourself. You have to rethink the management of people. My job is to promote others through education, coaching and mentoring for their betterment, so people feel needed and have a place and can make changes. For true empowerment, people must feel it." Ross Controls started with manufacturing, believing that if there were good results there, then other areas would come on board. The chief steward of the unionized plant in Michigan went to classes with others from the company and, after some initial hesitation, found that he could participate and could help convince those on the shop-floor of lean's value.

You don't get anywhere until you have the lean mindset, Smith points out. When his group was in class, "we thought 'pretty good stuff! Let's 5S this area!' But we

weren't really making progress because we had the old thinking in our heads. We felt 'I knew all this, but I don't think of it this way.' I thought that was very intriguing. The first and second day, you'd say, 'I've known all this.' But then you'd get lean eyes and say, 'I never looked at applying things this way. I always wanted this.' But did you really? The whole group needed to be shown. Input matters. There needs to be high agreement."

The plant floor at Ross Controls has had impressive changes with inventory reduction and process improvement in throughput and measurement, in delivery, quality, safety and morale. When the company's four key measurements (on-time delivery, productivity, cost of sales and inventory-to-sales ratio) move in the right direction, it's a good sign.

Prouty says that many companies see lean as primarily a manufacturing concept. "Senior management at Symbol sees value in manufacturing. We have several continuous improvement processes, including how to introduce product, usually a step that follows initial lean implementation; this ties to manufacturing. The next step would be to put in place processes to resolve issues around the lean concept.

"All senior management people should be lean champions," he continues. "We have workout teams. Six sigma is usually a next step. It provides a framework to collect information on problems to make them better or to solve them, a continuous improvement tool." Smith points out that as the lean journey progresses, everyone usually needs help. "You have to have a champion, someone relentless, because it's so easy to stop. All sorts of new problems, overseas issues, or everyday distractions can deter you."

Another warning is not to become consultant-dependent. Even the consultants agree on this one. Lean Learning Center describes its mission as to partner with clients, to transfer skills and knowledge, and "work ourselves to the point of disengagement. Consultants may be put in different roles as changes occur." Carlino explains that adults need to learn by application and the power of repetition; the more you hear it, the more you grasp it. He also recommends cascade teaching, which rolls down through an organization – the idea that if your boss is teaching you, you will pay attention, and others will then do so as you teach them.

Prouty adds a caveat: "I'd like to point out that one reason we see lean taper away is senior management change, especially just as a project is wrapping up. The concept must be ingrained in the company culture and in the middle management layer as well. Win over the CEO and the middle management level. Make sure that learning is balanced."

During a second class on leadership, the question was posed to Ross employees: "What will you do differently when you go back to work?" Smith

answers that you have to rethink the way you think about your people. Change is what it's all about. What lean does is teach ways to make change and to have people make change.

Remembering that lean values the individual, Smith suggests that you imagine the worst person in your company. You may think what a difference it would make if this person would leave. But, in reality, someone else will assume that position. The challenge is to mentor that person. "Lean leadership is all about that — the person has the ability. The responsibility is on management to be one team, one company, one person at a time."