

Lean Doesn't Have to Include Mean

By James Kettinger, IEA President/CEO

February 18, 2009 -- The proponents of lean manufacturing have generally focused on improved production floor dynamics as a solution to America's at-risk competitiveness. However, as many companies that at first embraced the lean concept discovered, successful implementation also requires a paradigm shift in the perception of who production workers are and what they can be expected to contribute.

[IEA, Inc.](#), a privately-owned Kenosha, WI company that designs, manufactures, and sells heavy duty industrial radiators, accepted the challenge of changing its production culture two years ago, and is now enjoying the rewards of lower operating costs and improved customer service.

"Any company's competitiveness would be enhanced by expanding the contributions every employee, regardless of job, makes to the bottom line," said James Kettinger, IEA's President/CEO. "But reaching that goal requires breaking the stereotype that office jobs are for knowledge workers and production jobs are for those not as intellectually capable.

"Educational accomplishments and intellectual capacity are very different. Even though many production and office employees did not include higher education in their career development, that is not evidence of their innate intellectual capacity," said Kettinger.

Before initiating its aggressive Lean Transformation Program (LTP) in 2006, IEA had sought to lower operating costs through traditional reduction methods with limited success. The notable achievements attained by LTP are heavily attributable to utilization of the creative capabilities of all members of its employee teams.



"It's almost like discovering an asset that was tucked away and forgotten," said Kettinger. "Our new environment allows the creativity and enthusiasm of our employees to bloom, which are the essential underpinnings of any transformation to a lean business environment.

Changing Attitudes

IEA management feels that a successful lean transformation relies heavily on every employee first understanding the impact his/her actions have on the company, and then using that knowledge to think and act like an owner. "Creating a new culture requires a more sincere and broader commitment to the team concept than does any other contemporary business approach," said Kettinger. "It results more from a change in management attitude than in taking things from employees or making large capital investments. Our cash cost for lean has been minimal."

IEA's organization is similar to most 230-person manufacturing companies. There are managers, supervisors, and lead people: 50 in the office and 180 production employees. There are administrative and maintenance positions, assemblers, material handlers, and fork truck operators. Some have advanced degrees and certifications and some didn't finish high school. Each has a traditional role and job description. But everyone is expected to be a business person, individually tasked with making IEA a success.

Production Floor Autonomy

The IEA LTP enables production employee teams to unilaterally make changes in their specific operations rather than relying on the more typical method of change through management initiation, which can often occur too late, if at all.

“Our production employees know better than anyone when their work areas and processes become inefficient,” said Jim Haut, director of plant operations. Haut feels several benefits have resulted from encouraging and allowing employees to make corrections on their own:

- Waste was eliminated as quickly as it was recognized.
- Revenues per labor hour increased more than 35%.
- There was a 25% reduction in accidents.
- On-time deliveries increased 12% and continue to improve, while shipments that were behind schedule saw the number of days late decreased by 50%.
- Turnover dropped, improving customer service levels and building profits.

“Most important, the contributing employees see the direct impact of their efforts and are motivated to improve even more,” added Haut.

The IEA Approach

Most basic to IEA’s success is treating employees with the respect they deserve.

“We’re focused on managing each employee to his/her strength without the notion that manual laborers are only capable of manual labor,” said Susan Newell, IEA’s majority owner, chairman, and former CEO. “We coach and support employees in their jobs and educate them on the business of IEA and how to be better businesspeople.

“Every operating department is challenged to conduct itself as a business unit. Each has a product or service it delivers to either other departments or the final customer. This creates delivery deadlines, customer expectations, personnel and safety issues, etc. and opens the opportunity for improvement in all areas,” added Newell.

Tools of Implementation

- Multisided, rotating message boards, dubbed the Towers of Power, are in eight departmental locations to help production employees assemble, analyze, and respond to the metrics that reflect their department’s performance.
- Critical measurements -- e.g., safety status, delivery record, quality level, cost of poor quality calculations, housekeeping condition, etc. -- are manually updated by each department’s employees with areas for improvement highlighted.
- “The form of the Towers is not as critical as the way they’re used,” said Haut. In 5- to 10-minute weekly stand-up meetings, the lead person from each department discusses his/her area’s results to a group of fellow department personnel, other leads, and middle and upper management, who walk from Tower to Tower to hear each of the presentations. “You don’t want to have to explain why your department fell down somewhere,” said Rickey Cooks, core department lead. “We don’t wait for management to tell us what



problems need to be addressed. When we see something that's wrong, we create and implement corrective actions on our own.”

- The Towers system has helped transform lead people, floor supervisors, and laborers into managers who can monitor their own progress without the daily involvement of middle and upper management, rallying around their successes and initiating resolutions to problems.
- Kaizen (Japanese for “good change”) events gather cross-functional teams for focused attention on particular continuous improvement goals. A substantial benefit of the Kaizen events is the understanding participants gain about how management operates and what their actions are intended to accomplish, helping Kaizen team members become better business thinkers.
- Even employees who had previously perpetuated an “us-them” attitude toward management regularly join the ranks of those always looking for continuous improvement. “All of us are being trained and empowered to improve as part of our daily job,” said Willie Gibbs, cooling section lead man.

Bonuses Across the Board

All of IEA's employees are included in a company-wide bonus program focused on achieving goals closely aligned with the information tracked on the Towers of Power: safety, delivery, quality, profitability, and value creation

Performance is reported monthly. Fifty percent of any bonus is paid quarterly, the remainder at year's end if IEA's yearly goals are achieved. “We strongly believe that quarterly distribution is very effective in maintaining the attention of those we're hoping to motivate with a bonus,” said Kettinger.

While bonus plans are often seen as expensive, IEA feels the cost is only a small portion of the financial gain produced when the goals are met. In addition, sharing of the benefits is not only equitable, but an important ingredient in driving culture change.

Company-wide Meetings

Monthly gatherings provide bonus plan updates and address issues such as new lean initiatives, inventory levels, turn rates, pricing theory, and major sales activities (there was even a basic course on understanding financial statements), and help every employee move closer to being a business thinker and a regular contributor to continued improvement. They're a venue for employees to collectively rally around their successes, and for management to efficiently refocus efforts on the next improvements. “They're not a scolding event for poor performance,” said Kettinger.

The cost of a monthly meeting is one hour of pay for every employee. “Not holding them would cost us much more,” said Kettinger. “They're a pillar of our culture change program.”

Just Really Getting Started

By definition, there is no end to continuous improvement. “We are extremely proud of our employees and their substantial contributions and accomplishments,” said Kettinger. “Their intellectual capability was a resource available to us all along, but latent,” he continued. “I believe many other companies that operate with traditional views of employee roles could uncover the same kind of resources by implementing a similar program.”