

Building Long-Term Success for Your Lean Initiative

The successful implementation of lean requires absolute leadership commitment.



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any manufacturing companies and executives are looking for ways to differentiate their processes, products and services while competing to win customers and market share. With the focus on ways to reduce waste, lower production and supply chain costs, and increase shareholder value, a key strategy has been to concentrate on lean manufacturing as a foundation for developing an edge over the competition.

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The Emergence of Lean

Lean has been a mainstay in many organizations since its implementation by Toyota. As Toyota points out, lean is based on a "production system which is steeped in the philosophy of 'the complete elimination of all waste' imbuing all aspects of production in pursuit of the most efficient methods."¹

Many companies worldwide have studied this system; as a result, its use has grown in application. A USA Today article addressing manufacturing viability during the most recent recession stated that "thousands of manufacturers... remained profitable during the recession by using a practice called lean manufacturing to become more costefficient." To quantify this a bit more, iSixSigma reports that "Compensation Data Manufacturing survey results found that 69.7% of manufacturing companies use lean manufacturing practices." In addition, a number of universities have studied the concept and integrated lean manufacturing into the curriculum, including the University of Michigan, the University of Kentucky, and the University of Dayton. A Google or Amazon search reveals many books on the subject, and there is even a nonprofit organization to promote lean: The Lean Enterprise Institute.

With the growth and importance of having a lean manufacturing organiza-

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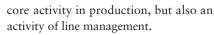
tion, the benefits have not gone unnoticed. An article on Lean-Manufacturing-Junction.com highlights several benefits:²

- Improved quality. As quality issues arise, problem solving techniques are used to identify the root cause of the problem and error-proof the improved process.
- Improved visual management. Defects will stand out and be easy to identify as a problem.
- Process repeatability and increased efficiencies.
- Standardized work. With increased efficiencies, the ability to do the job with fewer people becomes a real possibility.
- Easier to manage (a result of standardized work).
- Total company involvement. Lean is meant to involve the whole company; it helps promote the concept that everyone in the company, from the top down, has an important contribution to make.
- Safer work environment. A safe work environment is supported by the use of visual management and 5S in an organized work environment.
- Improved employee morale. Employee involvement and empowerment will make all members of the organization feel like they are contributing.

These are important benefits. As such, manufacturing leaders should consider a key question when implementing lean: "What needs to be done not only to achieve the benefits of lean, but to sustain the benefits long term?" The worldwide use of the lean concept can provide some lessons learned.

Focused Leadership

James P. Womack, a leading lean thought leader for over 30 years, and founder and chairman of the Lean Enterprise Institute, Inc., emphasizes that for long-term success, leadership must understand the importance of management focus on continuous improvement. Lean is a management philosophy. As such, as Womack states, there must be management dialogue on how to make continuous improvement—not only as a



Womack emphasizes a leadership focus away from just "attention on improving core processes in organizations by deploying brilliant tools, when we should have been focused on improving the management process itself."³ His advice on accomplishing this is two-fold:⁴

- "A lean management system for each organization can only be discovered through experimentation in the form of PDCA [plan, do, check, act]. And this requires a dialogue in each organization about the value-creating work of management and how to merge it with sustainable process improvement. Indeed, a discussion of how to make continuous improvement a core activity of line management."
- Lean practitioners must continually be "engaging senior managers as a team in evaluating the current state of each organization's management system."

Build Talent for Future Lean Success

When an organization is truly lean, it is more flexible and able to handle the changing macroeconomic conditions of the global marketplace. In the future of manufacturing, new technologies will continue to emerge and influence processes and methods of manufacturing. Examples include the Internet of Things, 3D printing, automation, nanotechnologies and machine-to-machine technology. Even so, lean will still need to be a vital part of the company's strategy.

Maintaining adaptability requires an investment in people to build lean knowledge for the changing landscape. This means ongoing knowledgebuilding for operations people, leaders, engineers and future employees. Opportunities include ongoing training and programs like lean certification (from organizations like the Society of Manufacturing Engineers or the Institute of Industrial Engineers).

As for investment in future lean knowledge and employees, this could include the creation of partnerships

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between manufacturers and local educational institutions in an effort to help the company add value in the new global marketplace. The University of Florida's Department of Information Systems and Operations Management, and the Department of Industrial and Systems Engineering, established such a lean educational partnership with Jabil, a global electronic product solutions company. Lean knowledge becomes critically important when one considers that "when an organization starts the lean journey, the odds are that almost no one will have deep knowledge of the way ahead, and almost certainly senior leadership will not know what is involved."5

Adopt a Lean-Focused Organizational Culture

A lean-focused culture means an objective of continuous improvement throughout the organization. George Koenigsaecker, president of Lean Investments, LLC (and past president of several companies that have implemented lean), states that to survive and thrive for the long term, manufacturing needs to build a learning culture. The term "learning culture" refers to "an organizational structure that allows people to constantly be reviewing all their processes and improving them." This then becomes the foundation for a lean culture-building a sustainable "culture that practices process improvement as part of daily life."

Along with this culture change will be an acceptance of the long-term view of this paradigm shift; in other words, it will take time. Koenigsaecker also addresses the predictable questions regarding "long-term," stating:

How long will this take? Would it be reasonable to assume that it might take a generation of management to establish a totally different culture? After all, changing from a fire-fighting culture to a process-improvement culture requires embracing an "opposite" approach, and "opposites" are very hard for adults to learn. While I can't really know which

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practices have been most important in establishing this learning culture, the thing I am most proud of is that, over 20 years, I led 11 corporations, as either president or group president, on the lean journey. And today all 11 of them continue to practice lean-process improvement. They have managed to do this through several generations of leadership change.⁶

Keep Lean Visible

Many lean efforts kick off with great fanfare (e.g., Kaizen events), signaling to the organization the importance of the effort. Maintaining visibility and successes of the lean journey are important. One way this can be done is by maintaining and revitalizing measurement scoreboards. During the lean initiative, the organization will garner new learning, and this learning will need to



be included in the measurement systems—which will then often result in new targets being set.

Once this is done, it is important to use a widespread communication scheme to share current performance metrics with the entire organization. One lean practitioner shares an example where a key learning came through interdisciplinary visibility of performance results:

We were measuring certain activities prior to lean, but we

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weren't tying them together. We now have a Global Metrics Team that creates our measures, whereas before each department set independent goals for its function and was not able to see how they impacted another group. Now measures are shared among various groups and sales can see how engineering is performing its function in order to help sales accomplish its goals.⁷

Thus, a visual workplace display not only provides feedback on performance to goals and expectations, it continues to send the message of leadership commitment via regular, refreshed, and updated communication. Couple this with the continued visibility of leadership (i.e., Gemba), and a visual workplace will play a key role in maintaining a lean culture.

Final Thoughts

Lean manufacturing has been the foundation for achieving good success for several decades. Many practitioners will emphasize that lean tools—5S, value stream mapping, total productive maintenance, Yokoten, etc.—are a flexible and cost-effective way to reduce waste and make improvements in the supply chain. Ultimately, this effort supports improved customer satisfaction.

However, there are likely some organizations that started the lean journey that now conclude they did not achieve their expected result. No one applying lean will say that it is easy. The transition to lean and sustaining the transition requires facing complex challenges. But it is implicit that failure is almost assured if there is no absolute leadership commitment to the lean concept when beginning the journey. The organization must commit to the lean effort and the requisite knowledge building process continuously. It takes time, resources, and a dedication to achieve sustained outcome and benefits.

For more information, contact the author at howellvw@corning.com or visit www.corning.com.

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