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Getting More from Lean

Seven Success Factors

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When Toyota created its lean production system in the late 1950s—drawing on the thinking of Henry Ford and W. Edwards Deming—the Japanese company revolutionized auto manufacturing. Since then, lean techniques have moved far beyond the shop floor. Still, the principles of lean production remain the same: an integrated, end-to-end process viewpoint that combines the concepts of waste elimination, just-in-time inventory management, built-in quality, and worker involvement—supported by a cultural focus on problem solving and the use of tools such as *kaizen* (continuous improvement), *kanban* (ongoing replenishment), *poka-yoke* (error proofing), 5S (workplace organization), and value-stream mapping.

Despite the ongoing popularity of lean tools and techniques, however, we've seen a variety of outcomes in our work with major companies around the world. Toyota's success with lean is, of course, legendary. But what types of results are other companies getting from their lean initiatives? And what are companies with the best outcomes doing differently than their less successful peers? To find the answers, The Boston Consulting Group conducted interviews with executives at a wide range of companies with varying degrees of lean experience. We then combined the insights gained with our observations helping clients succeed in their lean initiatives.

We found that most companies' first initiatives were in manufacturing but that lean projects tended to spread to other areas, such as human resources, finance, research, sales, order fulfillment, and logistics. As one executive noted, "[Our] original expectation was that [the lean program] would be expanded to manufacturing operations worldwide. As time has gone on, it's been expanded into call centers. I'm starting to think about how to implement it for a sales process."

Different Definitions and Evolving Goals

The executives we spoke with defined *lean* in various ways: as continuous improvement, as a way to drive out waste or increase process efficiency, and as a means to better understand client needs. Underscoring this lack of consistency, one interviewee summed up the issue as follows: "The organization doesn't define lean because it doesn't understand lean."

In many cases, cost was the primary catalyst of lean efforts. But other drivers included the desire to increase productivity or efficiency, stimulate cultural change, achieve greater agility or flexibility, improve quality, and shorten cycle times.

Goals tended to be narrower. Many pointed to cultural change as the key outcome. One executive explained that "[lean] has to become part of our DNA, part of our daily activity." Others defined goals in terms of efficiency. Another executive noted, "Success is defined not by the amount of waste taken out of the system but by whether it's enabled researchers to do their jobs better." Few defined success in terms of cost savings alone.

Goals for lean initiatives have evolved, however. Today the primary focus is continuous improvement of processes and corporate capabilities, which leads to improved competitiveness and business results.

It's Tough to Do Well

Most of the executives we spoke with said that lean programs are difficult or very difficult to implement. The reasons they gave varied. Some executives cited cultural resistance, lack of skills, or leadership issues. Others noted that their companies' processes aren't well understood or that their employees have trouble absorbing new strategies and methods. "People forget that their job is to serve the customer," observed one executive.

But despite initial difficulties, once a lean program has been successfully executed in one facility, rollouts to other facilities are generally successful as well, especially if word of mouth has been positive—success in one area can generate interest in other areas. Having a well-documented methodology and a process for sharing knowledge also helps pave the way for subsequent lean projects.

That said, our experience indicates that lean hasn't reached critical mass at many companies. Comments such as the following from the executives we interviewed make this very clear: "It's not embedded in the culture yet. Maybe it never will be, but it certainly isn't yet." "It gets more difficult each and every month, because people just pick the low-hanging fruit." "It's still too early. Toyota has been doing lean for 50 years, and they think they've just got it right now." "It's still in [its] infancy within the company. We've got a long way to go."

This inability to truly embed lean and its principles may owe partly to the fact that few companies are making the necessary organizational changes—in roles and responsibilities, management structure, and teams.

Seven Key Success Factors

Although some companies met their lean targets, others reported mixed results. So what are the companies that achieve the greatest success doing right?

Successful companies map out their core processes to fully understand how they operate.

As a starting point they focus on the customer, clearly defining the goals of the lean effort that add value or address specific customer needs. These goals are closely aligned with the business strategy, with an eye toward improving cost, quality, service, and speed. To this end, successful companies then map out their core processes in order to fully understand how they operate. This detailed analysis often reveals unexpected inefficiencies and complexities—and significant opportunities to improve performance by simplifying and standardizing work flows. Successful companies also plan their lean projects carefully, taking the time up front to design an effort that's of substantial value but achievable, rather than shooting for the stars.

Successful companies follow up their strong project designs with rigorous program management to keep teams focused on the end goal. But they also recognize the critical importance of the people side of the equation. They use proven change-management techniques to engage employees and ensure that changes become embedded within the organization and are therefore lasting. And they're persistent—they keep on trying until they get it right.

Specifically, our research revealed seven critical keys to success.

Choose strategic, customer-centered projects. Vague productivity or cost-cutting targets don't energize the hearts and minds of employees. But initiatives that are aligned with overall corporate strategy and focused on important issues related to customers can mobilize line management and cross-functional lean teams to work together more effectively. An executive we interviewed explained the dynamic: "One of the big 'aha' moments is when [the sales and production groups] realize that if they interact and work together better, it will be a better process that makes a real difference to customers."

Moreover, there is a critical need to clarify and align the links among corporate strategy, annual operating objectives and incentives, and lean projects. Improved production efficiency or other incentive targets, for example, should not promote overproduction that leads to inventory pileups. Rather, incentives should reinforce the notion that production will take place only when parts are demanded by the next process (and, ultimately, by a customer). Instead of evaluating capital expenditures as standalone purchases, investment policies should consider the impact of equipment on batch size and production flow. Product design and procurement should consider the impact of each design choice on production complexity and time frame. Policies and objectives in these important areas often conflict with lean requirements—ultimately leading to failed lean initiatives.

It's also important for the people working on lean projects to realize that their efforts—and the outcome—matter. Moreover, making strategic, customer-based targets the focus of lean initiatives reinforces the message that understanding, satisfying, and retaining customers are the top priorities. One interviewee noted, "It's the whole philosophy about being customer focused, about getting that ingrained into the organization."

Think big, but start small. Lean programs must be ambitious and far-reaching in order to drive real change. Think about the total value that the initiative can unlock. For instance, aim to transform your entire production system rather than settling for spot improvements. But start with small test projects that focus on the highest-priority areas. Use these pilots to refine new ways of working before rolling them out to the organization at large. To be clear, *small* simply means manageable in scope—not limited in terms of strategic importance or potential solutions. Don't be afraid to shake up the status quo. Consider making major changes to processes, roles, and incentives—or even completely eliminating some activities. Project teams must comprise the right mix of people who can put big issues on the table and pursue truly breakthrough improvements.

Besides being more feasible and manageable, smaller efforts are more focused, have clearer start and finish points, and allow teams to own a problem and optimize its solution. One executive explained, "I would strongly recommend that you start from a manageable scale and make it work. You have to be ready to stop, make it work in one location, then start again revising it." Success at smaller projects also builds momentum and positive word of mouth. As another interviewee noted, "It's good to break things down so people can see success actually happening in a shorter period of time." After such early wins, teams can roll out successful lean initiatives enterprisewide.

Managing change by involving people at all levels is critical to the success of any lean initiative.

Involve everyone—from top managers to line workers. Managing change by involving people at all levels of the organization is critical to the success of any lean initiative. The direct involvement of everyone, from line management to supervisors to shop-floor workers, makes available a great deal of knowledge and insight, creates companywide enthusiasm and buy-in, and embeds lean principles and capabilities throughout the ranks. But many companies fall short in this critical area, as these comments from our respondents show: "There's a lot of talk about [change management] but no action." "It's too much management-led and not enough floor-people-led."

Although some lean initiatives are seen as too driven from the top, the reverse can also be true: lean is perceived as just a shop-floor initiative with limited relevance for the rest of the organization and no buy-in from senior management. However, delivering value and results in one part of an organization can attract interest in lean initiatives and encourage their adoption elsewhere. At a financial services company in the United Kingdom, the CEO and corporate center adopted lean techniques after seeing them work day to day on the frontline.

Tailor your approach to your culture. Lean programs can succeed in a wide range of businesses, industries, and functions, but be aware of the challenges that different cultures present and customize your approach accordingly. For instance, people in an entrepreneurial culture that rewards individual initiative don't always welcome enterprisewide programs and generic communications. In these environments, a better approach is to use a "cascading" process in which managers tailor lean messaging and metrics to their groups. This increases buy-in and better addresses the specific objectives at different levels of the organization.

Similarly, a culture that prizes skilled individual contributors may not welcome team-based structures, yet teams are a basic tenet of the lean philosophy. This type of culture demands an employee-led, bottom-up approach that doesn't dampen creativity; a top-down mandate would likely backfire.

Then there are companies marked by a strongly hierarchical culture and independent fiefdoms, with little standardization or sharing of knowledge. To succeed in this type of organization, lean programs must focus on breaking down silos and empowering employees. The first step is to promote cross-functional and cross-organizational understanding so that people begin to think more broadly.

The key is for companies to strike a balance among employee empowerment, top-down mandates, and centralized execution and tracking—and the right balance depends on your culture.

Assign dedicated, experienced resources. Many companies shortchange their lean efforts by failing to assign full-time people with deep knowledge of—and expertise in—lean principles, tools, and techniques. For instance, a large manufacturer set up a corporate lean team but assigned only part-time and junior people to the task. As a result, the company achieved only a modest 4 percent reduction in the cost of goods sold. Best-in-class companies routinely achieve twice that amount.

By assigning dedicated and experienced full-time employees to lean programs, company leaders send a clear message throughout the organization that lean is a priority. That commitment greatly increases the odds of success. With these resources, lean programs gain traction more quickly and show results sooner, which helps build momentum and enthusiasm. But the full-time team members must include people who understand lean principles and tools—and can share their knowledge while rolling up their sleeves and working in the trenches with the team. These experienced people can take on the important role of teacher and coach during the ramp-up period and thereafter.

Although a centralized cadre of dedicated resources should kick-start a lean initiative, the ultimate goal must be to build lean capabilities in the work force so that continuous improvement can happen without an outside catalyst. Over time, companies should migrate to line ownership of lean efforts. This will typically mean changing job descriptions and incentive systems.

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Use metrics to drive progress. It's been said that if you can't measure it, you can't fix it. As a starting point, make sure that all metrics are tied to the overall strategic goals of the organization. The right set of metrics will help your lean teams focus on the right things and measure their progress. As one executive summed up, "If you don't track metrics you're only practicing." Unfortunately, too many companies either don't measure the results of their lean efforts or use the wrong set of metrics.

A European industrial-goods company used the 5S tool to create a cleaner, safer, more orderly production facility following the principles of *sort, simplify, shine, standardize,* and *sustain.* The improved work space should have led to productivity improvements, but whether it did or not may never be known for sure. The company failed to link its 5S activities to specific bottom-line targets. Absent the expectation of higher production rates, the operators may simply be taking longer coffee breaks now that their tasks take less time to complete.

BCG's research shows that time, financial impact, and behavior are the three factors that drive successful implementation. The best set of metrics tracks all three. Set specific milestones to keep your lean programs on track, ensure that they deliver the expected bottom-line impact, and identify risks early. Cost metrics are most commonly used, but on-time delivery, process speed, quality, safety, and morale can also be measured. Besides operational and financial measures linked to your program objectives, consider tracking behaviors as well—especially those that support new ways of working. The wrong behaviors, or falling back into old ways of doing things, can sabotage results.

Communicate, communicate, communicate. A strong and ongoing communication plan speeds the adoption of lean principles, techniques, and tools. It's also important for top management to maintain its visibility and create a continuous feedback loop. Be sure to tailor, monitor, assess, and adjust communications as needed. Face-to-face gatherings—such as town hall, breakfast, and lunchtime meetings—are especially effective. Performance scorecards are another good way to emphasize lean goals and demonstrate progress. Written communications such as newsletters and e-mails are also good channels for sharing information and updates. It's especially important to celebrate and reward success. As one interviewee explained, "When a project is completed, you'll see a headline [on the intranet] with a story and pictures. People think, 'Wow, they did that. I can do it, too!'"

Despite the enduring popularity of lean principles, tools, and techniques, few organizations have come close to achieving the success of Toyota and its lean production system. For most companies, the ideal of an unwaveringly customer-focused and engaged work force aligned around common principles and practices is just that—an ideal, and an elusive one at that. But by following these seven guidelines while building and sharing knowledge over time, companies can capitalize on the truly transformational power of lean.

About the Authors

Pascal Cotte is a senior partner and managing director in the Paris office of The Boston Consulting Group. You may contact him by e-mail at cotte.pascal@bcg.com.

Adam Farber is a partner and managing director in the firm's Boston office. You may contact him by e-mail at farber.adam@bcg.com.

Amyn Merchant is a senior partner and managing director in BCG's New York office. You may contact him by e-mail at merchant.amyn@bcg.com.

Petros Paranikas is a partner and managing director in the firm's Chicago office. You may contact him by e-mail at paranikas.petros@bcg.com.

Harold L. Sirkin is a senior partner and managing director in BCG's Chicago office and the global leader of BCG's Operations practice. You may contact him by e-mail at hal.ops@bcg.com.

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For Further Contact

For further information about the topics discussed in this report, please contact one of the authors.

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