AlixPartners

OPERATIONAL IMPROVEMENT

Myth versus reality: Lean manufacturing

MYTH 2

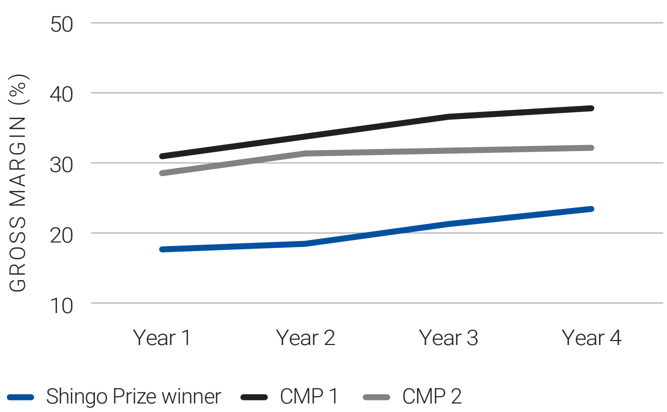
LEAN COMPROMISES AGILITY

The philosophy and practice of lean have taken hold at large manufacturers worldwide. Now smaller manufacturers are adopting it as well—and in the process discovering some of the myths around lean's purported flaws and shortcomings.

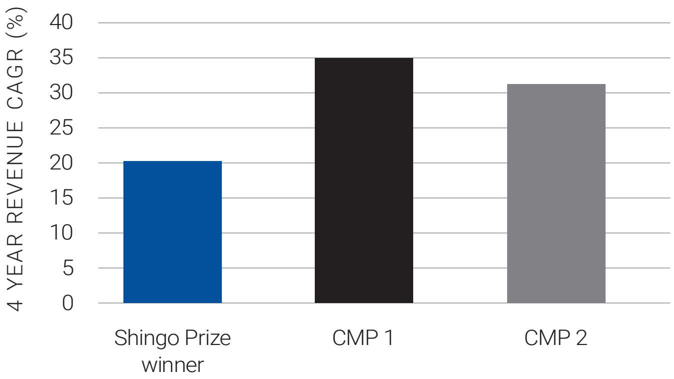
This article is one of a series that takes on the myths about lean, identifies misconceptions that can stymie implementation, and offers practical advice for planning and executing a lean initiative. In this installment, we tackle the myth that lean makes for brittle, inflexible operations.

On average, National Shingo Prize winners have worse revenue growth and gross profit percentage than their peers

GROSS MARGIN PERCENTAGE SHINGO WINNER VS. PEERS FOR AUTOMOTIVE SUPPLIERS



REVENUE GROWTH SHINGO WINNER VS. PEERS FOR AUTOMOTIVE SUPPLIERS



Source: AlixPartners analysis of publicly available data

In automotive, the birthplace of lean, Tier 1 Shingo Prize winners performed below average on both revenue growth and gross margin. Similar results are seen in the other sectors analyzed (e.g., aerospace/defense, medical devices, electronics).

Complying to textbook lean principles will not necessarily lead to financial success

The fact is, lean and agile can reinforce each other—as long as both of them are effectively organized, coordinated, and executed.

Manufacturing executives must constantly balance the need for ever-increasing efficiency with the equally pressing need to remain agile, flexible, and resilient in the face of disruption. They worry that in cutting the fat from their operations, they risk impairing their organizations' ability to respond quickly and effectively to such events as the emergence of competition from unexpected quarters, snags in the supply chain, or sudden macroeconomic shocks. But is it true that lean operations and business agility are incompatible with each other?

The fact is, lean and agile can reinforce each other—as long as both of them are effectively organized, coordinated, and executed—which is to say, managed. Implementing lean manufacturing depends on transforming the culture to achieve and embed improved performance. By focusing on immediate cash generation while at the same time driving that transformation, company leaders can successfully embed lean thinking while improving short term performance.

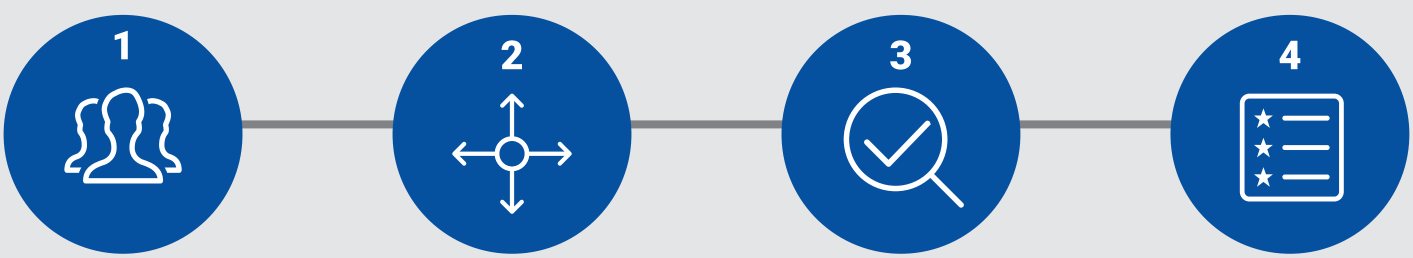
The focus on cash generation is necessary because culture cannot and does not change overnight. It takes time to embed new values, behaviors, and beliefs—the building blocks of culture. But even though it's absolutely essential to teach everyone in an organization to think lean—that is, to recognize waste and take action to reduce it—lean thinking alone won't deliver the cash needed to weather disruption, however it manifests itself. Transforming culture while achieving and sustaining financial results demands leadership together with daily management, project management, process discipline, and the right key performance indicators (KPIs). The presence of those elements distinguishes agile, effective, lean organizations from brittle, lower-performing plants.

In practical terms, effective leadership means continuing to promote the bottom-up generation of ideas for improvements—a surefire way to engage the workforce and gain buy-in for a transformation—while finding ways to translate incremental improvements into measurable savings. That requires management intervention to identify and address systemic, cross-functional, or higher-level root causes such as the areas of planning, scheduling, and product complexity. It's leadership's job to weigh each idea against others, to next choose the ideas that can generate the biggest positive impact in the fastest possible time, and to then winnow those ideas to a few of the most promising.

CASE EXAMPLE: ACHIEVING RAPID CASH IMPACT

Recently, a manufacturing organization sought to achieve a significant and rapid cash impact while simultaneously kick-starting culture change and implementing key management processes to ensure execution and sustainability. To do so, management reoriented its perspective away from process or productivity measures (such as reduction of standard hours) toward assessment of productivity-improvement opportunities by their potential to generate cash. Teams of practitioners followed a clear path of activities to establish ownership of the results.

KEY FACTORS ENABLED THE SUCCESS:



The right people participated

The team looked at the big picture

The team used the right tools for the job

Management executed on the fundamentals

Several key factors facilitated the success of that approach

1 THE RIGHT PEOPLE PARTICIPATED

The core improvement team was cross-functional and cross-level from the outset, involving representatives from every relevant operation and function—from the shop floor to finance. The team established ownership quickly and applied critical operational knowledge that reduced guesswork and false starts. Management, not just the lean coordinator or the black belt, was responsible for achieving results, and everyone involved was held accountable.

2 THE TEAM LOOKED AT THE BIG PICTURE

Through constant communication and message reinforcement, everyone involved in the lean initiative maintained focus on optimizing the overall performance of the entire plant, not just a line or a machine. Taking the view that any money is good money, the team looked at all potential sources of savings—both point opportunities and broad, plantwide issues such as scheduling and maintenance planning. Dashboards and visual models reinforced the practice of considering all the largest elements of the cost structure to set priorities. A structured workshop proved an extremely fast and effective means of assembling and identifying the best opportunities and deciding which few to attack right away. In this case, the top four priorities were to implement more rigorous and more forward-looking scheduling and sequencing; to ensure preventive maintenance got performed according to plan; to actively reduce labor costs; and to streamline materials movement from the warehouse to the line.

The lean initiative, which encompassed multiple rungs of the plant organization, empowered shop-floor employees to offer their ideas for generating cash impact. The morale boost when those employees were recognized and felt valued for their contributions was palpable. The initiative also helped identify naysayers, who were slowing progress—and in many cases had done so in the past. Management took them aside for counseling and retained only those willing to commit to the improvement program—again to the benefit of morale.

3 THE TEAM USED THE RIGHT TOOLS FOR THE JOB

Only after opportunities had been selected and prioritized did the team decide on the right approach and tools. The right approach enabled the team to avoid the common pitfall of selecting the tool first and its application only later, which frequently results in mismatches. One of the opportunities selected was to streamline and simplify the movement of materials and operators. Once the opportunity had been identified, the tool choice was clear: a spaghetti diagram to trace each movement. Once managers could visualize the process, it became relatively easy to diagram better ways of staging materials near each operator workstation. The exercise ultimately reduced movements by over 50% and cycle time for the activity by 30%.

The improvement team also identified an opportunity to reduce labor costs by rearranging production line layouts. Using a lean work cell redesign tool, the team repositioned line layouts in such a way that on many assembly lines, one single employee became able to perform tasks that had previously required two. Identifying such redundancies helped reduce direct labor costs by over 10% and improve productivity per employee.

4 MANAGEMENT EXECUTED ON THE FUNDAMENTALS

The improvement team also implemented a rigorously structured tiered management process to execute the improvement program and measure its impact. The process succeeded in establishing a cadence of regular meetings—in the form of huddles at the beginning and end of each shift as well as weekly progress reviews—and integrated those gatherings with budgeting, forecasting, and reporting activities. The teams developed meaningful KPIs such as financial impact and made them visible to the right people. And standards and planning processes dynamically incorporated improvements and brought any backsliding immediately to the surface.

RESULTS

The manufacturing organization increased production by 17% over a four-month period with minimal capital expenditure, equating to an additional $2.5 million of product per month—all while reducing labor costs by 10%.

Conclusion

When disruption looms, a fast-moving, rigorously structured approach to operational improvement doesn't just deliver rapid, substantive cash impact. The introduction and mainstreaming of regular meeting cadences, metrics focused on cash impact, strategically aligned KPIs, and technical upskilling all promote long-term culture transformation. The organization that emerges from that transformation will be capable of continuous efficiency improvements while it enhances its ability to adapt quickly to changes in its operating environment.

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ABOUT US

For nearly forty years, AlixPartners has helped businesses around the world respond quickly and decisively to their most critical challenges – circumstances as diverse as urgent performance improvement, accelerated transformation, complex restructuring and risk mitigation.

These are the moments when everything is on the line – a sudden shift in the market, an unexpected performance decline, a time-sensitive deal, a fork-in-the-road decision. But it's not what we do that makes a difference, it's how we do it.

Tackling situations when time is of the essence is part of our DNA – so we adopt an action-oriented approach at all times. We work in small, highly qualified teams with specific industry and functional expertise, and we operate at pace, moving quickly from analysis to implementation. We stand shoulder to shoulder with our clients until the job is done, and only measure our success in terms of the results we deliver.

Our approach enables us to help our clients confront and overcome truly future-defining challenges. We partner with you to make the right decisions and take the right actions. And we are right by your side. When it really matters.