# **Alix**Partners

# **OPERATIONAL IMPROVEMENT**



# Myth versus reality: Lean manufacturing

# MYTH 3 LEAN PILES ON THE OVERHEAD

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 take apart the notion that lean inevitably means red tape and costly new staff.

Traditional lean implementation is slow and not focused on cash generation, hence a different and accelerated approach is needed.

# LEAN IMPLEMENTATION

- Approach is bottom-up, great for engagement
- Focus is on implementing lean tools, and building a lean culture
- Strong **focus** on direct labor and quality scrap, but less focus on overhead
- Kaizen events typically target narrow issues (e.g., speeding up a line or a scrap problem)
- Lean was developed for discrete, high volume manufacturing
- Lean assumes that a **foundation** (leadership/daily management, process discipline, etc.) is in place

# A NEW APPROACH

### 1. Focus on cash

- Aggressive, opportunity-based targets
- Start with top-down analysis and ruthless prioritization (effort versus impact) to focus limited resources on the highest impact projects
- Optimize total performance of the plant (cost, quality, delivery), not just a line or machine

# 2. Be practical

- Start with the problem and pick the best tool, not the other way around
- Any money is good money, look at all potential sources of savings

# ISSUES

- Approach is slow and results in 'multi-year journey'
- Focus is often not on solving high impact problems
- Standard lean tool kit does not address all the major cost drivers
- Less focus on overhead
- Kaizen events may not address systemic/ cross-functional root causes (planning, product complexity, etc.)
- Assumed **foundation** is almost never in place in low performing plants
- Small **process improvements** won't automatically translate into savings

## 3. Institutionalize improvements

- Management is responsible, not just the lean coordinator or black belt
- Improvements are incorporated into the standards/planning, back-sliding is visible
- Strong emphasis on basic management processes and discipline

The odds of success improve greatly when a more tightly targeted program takes aim at specific processes, lines, or workflows and is implemented by teams that hold each member accountable for results.

Companies sometimes hesitate to implement a lean manufacturing program because they don't want to take on the paperwork, documentation, administration, processes, procedures, and additional staffing that such a program entails. But, contrary to many organizations' experience, lean doesn't have to add burdensome overhead.

Here's why it so often does: lean manufacturing and Six Sigma are implemented typically in the form of a comprehensive, enterprise-wide program, with a multiyearimplementation road map, often starting with a widespread 5S rollout or similar effort. The 5S system is a workplace organization method that uses a list of the five Japanese words *seiri*, *seiton*, *seisō*, *seiketsu*, and *shitsuke*, which have been translated as *sort*, *set in order*, *shine*, *standardize*, and *sustain*. An approach on that scale does indeed require dedicated resources and other overhead—and likely will also generate small and slow paybacks, as was discussed in the previous articles in this series. But a new approach to manufacturing improvements can eliminate the need for much of the potential overhead.

The misconception about lean overhead is rooted in the common—and mistaken—belief that the implementation of lean and Six Sigma processes will, in and of itself, deliver the magic fix. As valuable as lean and Six Sigma tools are, enterprise-wide approaches that focus only on implementing them tend to collapse of their own weight before they can demonstrate any meaningful benefits. By contrast, the odds of success improve greatly when a more tightly targeted program takes aim at specific processes, lines, or workflows and is implemented by teams that hold each member accountable for results.

To improve their chances of success, manufacturing companies should keep the following imperatives in mind when launching a lean program.

# **KEEPING IT LOCAL**

Too many companies approach manufacturing improvements as a massive, enterprise-wide undertaking. That approach requires a large program management infrastructure as well as extensive and broad-based training across the facility or the enterprise. And much of that training gets forgotten before it's ever put into practice by the majority of employees.

A more localized approach focuses on specific opportunities selected for their potential to generate significant financial payback over a short time frame. Rather than develop a vision and a detailed road map that describes how to fix everything over an extended time frame, the localized approach generates multiple, more manageable waves of projects and institutionalizes a handful of key management practices. Training is provided for specific teams based on the teams' roles and projects and only when and as they need it. Those focused actions reduce the need for broadbased program management and dedicated trainers to cover the entire enterprise.

#### **CASE SUMMARY**

A recent case demonstrates what can go wrong when a company launches an overly broad implementation of lean—and what can go right when the company tightens its focus. The company's management had issued a global mandate that all of its plants start tracking overall equipment effectiveness (OEE), beginning with one minor piece of equipment at each location. Plant personnel duly reported the data to corporate, which compiled the information. But because corporate did not use the information to generate cost and productivity improvements, the OEE reporting quickly devolved into one more pointless bit of bureaucracy that triggered periodic audits but had no impact on plant operations.

**SOLUTION:** The management team redirected its OEE drive to two pilot sites that tracked the effectiveness of critical equipment and then used the data to identify and plug specific cost and efficiency leakages selected for their financial impact and speed to payoff. Plant personnel involved in the pilot programs then cross-trained their colleagues elsewhere on the floor, which spread the new, efficiency-focused practices across the organization and built momentum for additional improvement measures. **2** SETTING RE

A better approach to lean shares more conventional methodologies, with an emphasis on cultural change. Long term success hinges on changing mindsets and behaviors. It's an approach that departs from convention in its emphasis on individuals and teams recruited to take on specific projects and activities and directly accountable for the projects' progress. Organizing an improvement program along those lines contrasts sharply with the conventional approach of placing an enterprisewide program in the hands of a small number of dedicated, well-trained resources (usually referred to as champions), whom the rest of the enterprise tends to view as program owners.

The alternative to the conventional approach is to charge individuals and teams with improving a single process, line, or work stream and hold them accountable for results. Of course, teams and individuals still need support in the form of the right training and tools, and they still require the expertise of a black belt or a lean coordinator. But those process experts are simply part of the project team, providing input and training for team members when and as needed. Leadership of the project and accountability for it remain with plant personnel and management.

A more localized approach does eventually reach every corner of the enterprise. But it does so in a phased, gradual manner, with visible practices and successes that build momentum along the way—all while delivering material cost savings far more quickly than could be achieved by taking the conventional approach. This approach typically proceeds by involving one or more shop floor teams in projects that directly improve their jobs while teaching them (i) to analyze—not just see—and (ii) to correct. Lean manufacturing simply becomes a part of the job and not an additional programmatic burden.

#### **CASE SUMMARY**

The company organized shop floor teams led by local process engineers or maintenance managers who were empowered to drive change without becoming entangled in bureaucracy. With ownership and accountability for results in place up and down the line, the teams began to collect data that fed into relevant key performance indicators (KPIs). Meetings were reformatted to address specific KPIs, with those in attendance accountable for analyzing any shortfalls, for identifying actions required to correct them, for executing those actions, and for documenting the actions and the results. Crucially, the shop floor teams weren't solely accountable for the fate of the project.

**SOLUTION:** Management, from the site manager on up, were the ultimate champions and had final accountability for the program's success. To enforce accountability, the company revamped its performance management system. They linked the new system to the improvement program and focused the systems on adding measurable value rather than filling out forms and checking boxes.



# **REQUIRING VISIBILITY**

Fundamental management processes and systems are other critical determinants of program success and must become parts of many people's jobs. The management processes start with shop floor controls and performance monitoring of key hourly and daily production data that gets captured and posted by shop floor workers.

The data gathered by the workers feeds into dashboards that display key performance metrics such as cost per unit, material yield loss percentage, production volume, and downtime. Updating those metrics gets coordinated by a single person but distributed to specific individuals accountable for specific data.

#### **CASE SUMMARY**

The dashboard data was the raw material of the reviews that replaced the traditional plant meetings, which, as most line workers and managers would readily admit, were ineffective and a waste of time. The dashboard reviews, on the other hand, were dedicated to identifying exceptions, good or bad, analyzing them, and addressing the bad ones. The meetings accomplished more than just covering all the numbers regardless of their impact on manufacturing processes.

**SOLUTION:** The dashboard data reviews put the right people in the room, focused them on the right KPIs, and ensured that they captured actions to be taken and followed up until completed. Team exercises that delivered tangible results replaced dull, unproductive reviews that had changed nothing. With the new approach, the meetings became crucial levers for cascading an action-oriented, lean mindset throughout the organization and underpinned the organization's cultural and operational transformation.

A program that asks its people to measure production and financial impacts will ultimately yield a culture focused on analyzing performance, identifying and resolving shortfalls, and instead of ticking boxes achieving material financial improvement.



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# Conclusion

Ultimately, the success of a lean implementation depends on people and how they're used. A company that defines success by metrics like the extent of a program's implementation and its status will put its people to work measuring things like percentage of staff trained and percentage of site covered by 5S. The culture that grows from those activities will be a bureaucratic culture focused on checking boxes rather than achieving specific results. Conversely, a program that asks its people to measure production and financial impacts will ultimately yield a culture focused on analyzing performance, identifying and resolving shortfalls, and—instead of ticking boxes—achieving material financial improvement.

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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.

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