Has Continuous Improvement Met Its ROI Match?

By Joel Hans, Managing Editor, Manufacturing.net [1]

A recent report from AlixPartners posited a surprising finding in the field of continuous improvement (CI) programs for manufacturers: Most companies engaged in Lean, Sigma Six, or another toolkit are achieving a poor return on their investment, and appear to be only partially engaged in the process itself. Considering that the entire purpose of a CI program is to reduce costs, a lax ROI is one of the last results one might expect to find, but after speaking with Steve Maurer, Head of the Manufacturing Practice at AlixPartners, it's clear that these disappointing numbers are not a failure of continuous improvement, but rather skewed perceptions and flawed applications.

Many manufacturers, particularly those who are achieving sub-par returns, have an idea that continuous improvement is simply a philosophy change, and not a capital investment, and are applying tools that aren't exactly suitable for their particular operations. Maurer and AlixPartners -- along with the *Manufacturing.net* editorial staff -- hope that this survey will help serve as a wake-up call to manufacturers who simply blanket their processes with continuous improvement philosophies without real engagement.

The survey found 81 percent of manufacturers currently engage in some kind of CI program, but the engagement in these programs runs the gamut (**Figure 1**). Some companies have an executive-supported effort that trickles down to every part of the company in a structured format, while others simply encourage individual managers to increase efficiency without any real structure. Tied closely with this engagement is the purposes of the program itself. The survey found that the top three drivers for CI programs are short-term cost cutting, quality improvement, and throughput improvement.

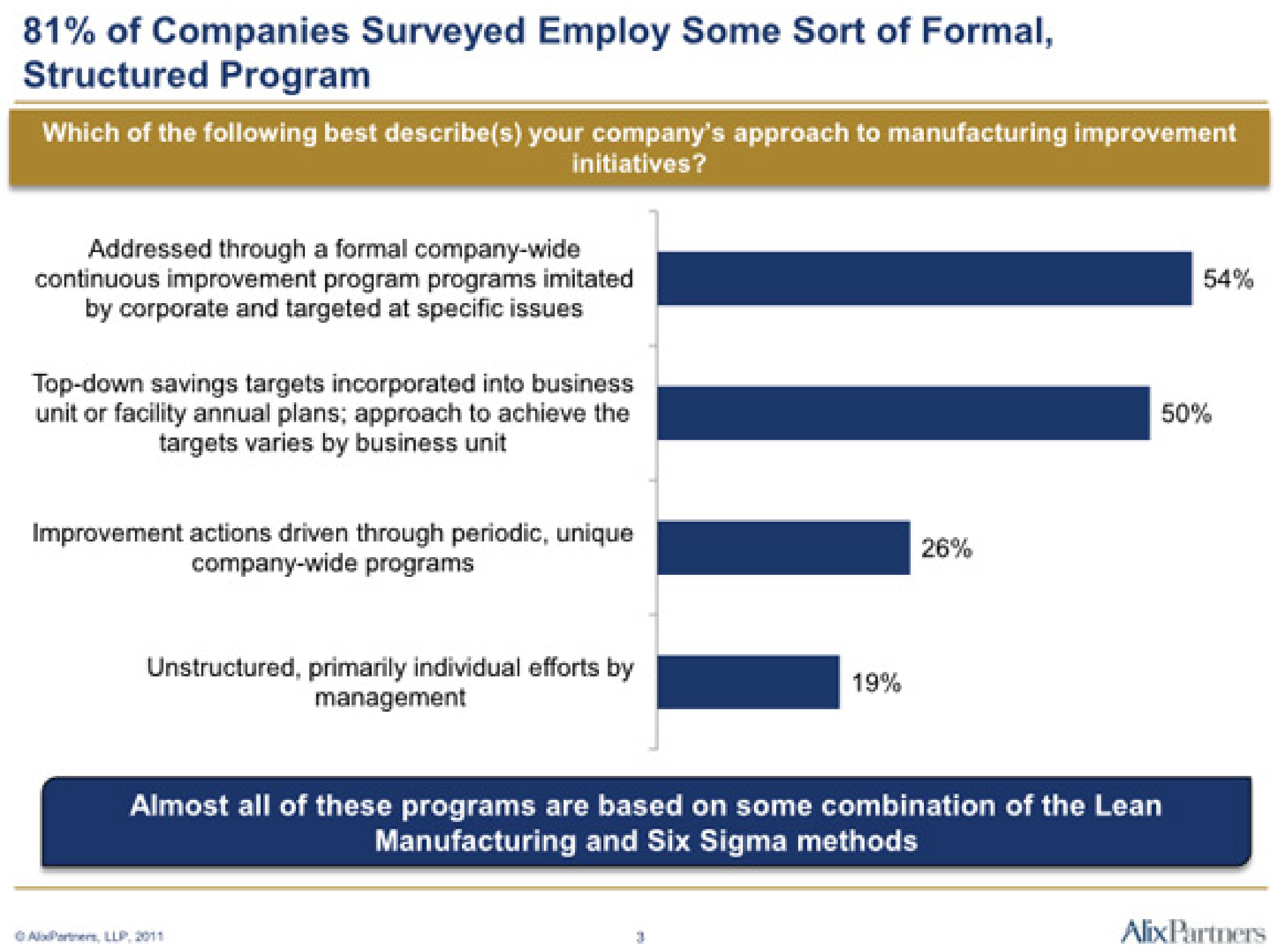

Figure 1

Despite this seemingly well-thought effort to introduce CI into manufacturing processes, the survey revealed a rather surprising contradiction: more than half had savings targets of less than five percent (low expectations), most reported savings lower than these already-meager targets (lack of engagement), but overwhelmingly rated their programs as "effective" or "very effective" (perception). This triad of issues are precisely what Maurer believes is currently keeping CI from being the best it could be. Maurer says, "If you set low targets and miss them, and don't even sustain that, it doesn't seem to be very effective."

Expectations

Maurer says the survey shows there is a misstep in expectations when a company is beginning -- or continuing -- a CI program. Many firms get stuck in the difference between "philosophy" and "cash." The former is the idea that by pushing CI principles down among the plant floor staff, they will automatically find ways to eliminate waste, and that will lead to cuts in costs. The latter, on the other hand, posits that by targeting a specific savings, companies will better be able to apply the CI tools to reduce waste in a reasonable way.

Maurer says that many of these companies with lowered expectations simply don't create targets for themselves. "They think about it more as a culture change and a 'journey,' and if they do all these things the savings will come," he says. "That's theoretically true, but it could take a long time, and in our experience, isn't as effective as if you have real targets." In any economic period -- recession or revolutionary growth -- reducing costs through targets is a good thing, but it's even more important in a market like today's, according to Maurer. If companies don't set realistic-but-ambitious goals for their CI program, they're unlikely to get any real results.

Many on the fringes of CI application also fear its associated results. Maurer says that many people, when approaching a CI program, will have low expectations due to a perception that employees will reject the idea. What employees would work at reducing waste when it would cost them their jobs? According to Maurer, that just isn't the case: "I can count on one hand the number of cases where the workforce refused to participate because they didn't want it to cost any jobs. Most people want to do a good job. It's hard to argue that making a bunch of scrap is good."

Engagement

Creating a target for a CI program is a good and necessary start, but as the survey shows, many are still struggling with how to convert this to financial impact. 36 percent of respondents said their CI program took longer than expected, 34 said the project was not well managed, 33 percent said there was a lack of resources to complete the project, and 29 said the program was subject to wrong goals/targets (**Figure 2**). Most projects are being hamstrung by one or more of these issues, as can be seen in the chart below.

Figure 2

Maurer says these issues are all caused by a similar problem: Instead of perceiving CI as a framework or a toolkit, many companies measure success by how many of these tools they've implemented -- a paintbrush approach, in other words. Maurer says, "If you get so wrapped up in the method as opposed to what you're trying to accomplish, then you'll get a bunch of tools implemented but not many results." Companies integrate cells into their production, single-piece flows, or value stream maps, thinking that any change will be an improvement, but according to Maurer, "[these tools] might be the totally wrong thing for [a company's] manufacturing environment."

Instead, companies need to step back and find what specific parts of their production will need to be focused on first. Should they move their production into cells, or should they be looking for better ways to keep employees from moving around the plant floor too much during the workday? Maurer says, "The ones that are effective are the ones who ask, 'Where is the biggest opportunity -- quality or cost or throughput -- and what's the right tool to apply?' Maybe that's a Lean tool, maybe it's a Six Sigma tool, or maybe it's just practical common sense. The people that approach it that way tend to get better bang for their buck than the people who are using the cookbook approach."

This lack of engagement is hurting many companies when it comes to realized savings, according to the survey. When tracking ROI for their programs, more than 75 percent of the survey respondents indicated the program would pay for itself in more than a year. According to Maurer, this could indicate that many perceive of CI as a "fixed" cost -- one that will continue to eat at the bottom line -- and not as an investment, which will quickly recoup its cost.

In addition, a significant 41 percent of respondents said they were "not sure" what their annual ROI was -- a clear indicator they are not properly engaging in the program from all levels of management. Many, on the other hand, were aware of their ROI, but the data wasn't on their side. Of the 47 percent who had a target savings of more than five percent, only 31 percent met that goal. By avoiding the cookbook approach and focusing on measureable results and return on investment, Maurer believes many companies can turn these poor results around.

Perception

These low expectations, combined with a lack of engagement in the actual business processes involved in CI, has created what both the survey and Maurer call a "perception gap." Maurer says, "If you look at half of the respondents, a significant portion of those were missing [their target] or not sure they were going to sustain it -- and 90 percent of them still thought their programs somewhat or very effective. If you set low targets and miss them, and don't even sustain that, it doesn't seem to be very effective."

What, exactly, is causing this gap between hitting targets and being considered effective? It could be the desire to create an environment of continuous improvement without an effort to hit savings targets. These manufacturers aren't conceiving of CI as a true investment, so any change is considered an improvement, no matter how much it costs upfront. Maurer aggress with this sentiment: "I don't see why you would treat that any differently than buying a new machine or building a new plant."

In order to combat that false perception, Maurer has a few suggestions for manufacturing outfits in any stage of CI implementation.

1. Focus on the cash. Aggressive targets will help spark more creativity, and will force managers to target the truly costly processes instead of the quick fixes that save only a few dollars.

2. Choose opportunities before tools -- find those problem spots and then decide which toolkit you'll use. Don't run in assuming you'll be using Six Sigma, or Lean, or anything else.

3. Any improvements must be "institutionalized" throughout the company. Don't simply give certain employees "Black Belts" and ask them to mop up the low-hanging fruit. If the company isn't involved at all levels of management to focus resources on the highest impact opportunities, no CI program is going to perform the way it could.

Maurer is insistent that despite the survey's results, Lean and other CI initiatives are legitimate, cash-saving programs that manufacturers can implement to reduce waste and cut costs. He says, "If you start with, 'I've got a problem that I need to solve,' and then think about this as a framework to get there, and not something to slavishly follow like a cookbook, then you'll have a happy ending."

Links:
[1] http://www.manufacturing.net/default.aspx