

Why Lean Isn't Working in the Print Industry, and What You Should Be Doing About It!

Kevin Cooper, Assistant Professor klcooper@calpoly.edu Malcolm G. Keif, Associate Processor mkeif@calpoly.edu California Polytechnic State University Graphic Communications Department 805-756-2500 www.calpoly.edu

Change does not come easily for the print industry. Actually, strike that. Change does not come easily for most industries. There are a wide variety of reasons why people, companies, and industries do not embrace change. Without a willingness to change, companies get stuck in patterns that prevent them from not only progressing operationally, but also culturally.

That Great Lean Expansion

In recent years, lean manufacturing has gained favor in the printing industry. Viewed as a means of cutting waste and subsequent costs, lean is perceived as a way to recover income by improving operational efficiencies. Lean was a central theme at this year's Continuous Improvement Network conference, cosponsored by PIA/GATF and the Flexographic Technical Association (FTA). At the CIN Conference, multiple presenters educated the audience on lean principles and spoke to the lean efforts taking place in their facilities. Their lean success stories were clearly "works-in-process" with numerous gains documented and growing lists of areas and items to address. It was quite exhilarating to see momentum building around lean initiatives and lean tools

We see numerous lean initiatives being introduced in the industry. 5S, a process for systematizing workplace organization, has seen wide-spread implementation across the industry among those who have adopted lean principles. Many companies see 5S as a tool to improve process efficiency by placing tools and supplies at the point of use, and using visual management techniques to monitor processes and replenish supplies.

Another lean tool that has seen widespread use is the *Kaizen* event. These focused process improvement activities use teams to infuse rapid, intensive, and focused attention into improving a work process over a period of only a few days. These events jumpstart lean initiatives by placing significant energy behind improvement efforts using a team approach.

Continued focus on quick changeovers remains a central theme. Rapid makeready techniques are viewed as a means to move non-chargeable time to chargeable time. *SMED* (Single Minute Exchange of Dies)

improvements are achieved through substantial equipment reengineering, as well as focusing on external processes to improve offline changeover times. We are encouraged that many equipment manufacturers are putting substantial energy into reducing makeready times, as well as standardizing the changeover process.

Just-in-time delivery has been around for a few years, but some companies are beginning to understand how to level and predict the flow of materials, as well as use *kanban* systems to initiate replenishment. This is particularly powerful for those companies who have successfully developed highly integrated supplier partnerships.

We are encouraged that a few companies see lean as more than just a set of tools. These companies understand the real power of lean manufacturing: *the empowerment of employees to initiate systemic operational change*. These companies see lean as something that goes beyond simply making incremental improvements to the bottom line.

Lean Failings

Despite a few discrete lean success stories, we are confident that lean has largely failed in the printing industry. That is tragic. It is clear that most see lean as a set of tools to improve efficiencies. However, lean is much more than a set of tools. Its heartbeat lies in the foundational principles that underlie those tools. Remember, lean was not developed as a program for consultants to sell. Rather, lean is a realistic, logical, and proven response to fundamental business challenges. It is based on the premise that people, when challenged, informed, and properly rewarded, develop innovative solutions and drive needed business change.

Change Management Issues

So, lean isn't working in the printing industry and you should do something about it. The primary reasons lean fails focuses around five issues about change management. Review the list below and see how many of these apply to you or your business.

1. Fear of becoming something you know nothing, or little, about. Intuitively, we know that change requires becoming, or doing, something differently than we presently are. This logically breeds a certain amount of uncertainty, which most people would prefer to avoid. We default to those things we feel we know or have greater certainty of occurring. It is far simpler to continue on a present, known course than to deviate; even when we know the current course will not likely lead us to success. Industry articles, conferences, and consultants continually press the printing industry to become something more than "just printers." It may be intuitively easy to accept this as a concept, but it requires great courage to actually head down a different pathway for potential success, especially when short-term profits are sacrificed for sustained gains.



2. Fear of losing your identity. This applies to both companies and individuals. People, and companies, become known for something. Contemplating a new direction disrupts our fundamental beliefs about ourselves; what we stand for and what we believe in. Most change management practices dictate that managers act differently. Conceptually, this is easy to embrace, but for those involved with the required change, it attacks the core of their belief systems involving who they are and what they do. Much is written about getting rid of those who "aren't along for the ride" or "can't embrace the new thinking," but little is done to find ways to allow those who struggle with the change process to find the means to succeed. Some lean concepts require fundamental change—a frightening proposition.

3. Fear surrounding the scope of what needs to be done.

Many printing firms are not positioned for long-term success where they stand today. Transforming a company, including the culture, is a massive undertaking for anyone; even those adept at managing change. Change must be managed concurrently with managing the existing business and may require a phased approach to reduce the feeling of being overwhelmed. Fundamental change is required while circumstances seemingly allow only incremental steps. The sheer magnitude of what needs to be accomplished stops many companies in their tracks from undertaking needed action. Transforming a company into a lean enterprise is a marathon, not a sprint.

4. Fear of moving away from existing support base.

Whatever you are doing today, you got there with customer, supplier, and employee support. Your business model and methods evolved from the perceived needs of their time. The values your firm embraces have evolved from the rich history people associate with it. It is disruptive to think about altering business methodology and potentially alienating the support base your business has worked hard to earn.

5. Habits are habits because we perpetuate them.

Fundamental change in a business requires change across the entire business. Yet, most businesses are organized around functions or departments that compartmentalize an employee's view, making it difficult to address business-wide needs. We have trained and rewarded people to focus on narrow segments of a business, which compounds any effort to suddenly view and act

on the big picture of how the business should operate. Lean requires both a change of habits and a change from micro to macro attention.

Much is being written regarding lean manufacturing and the rethinking of your business in lean terms. Fundamental tenets of lean include focusing on value creation as defined by your customer needs, not on the basis of what your capabilities are. Lean tools are taught at conferences and seminars to help printers identify waste and drive it out of their business. Waste is redefined from traditional paradigms around spoilage. We are taught that inventory, an asset in your financial records, is actually a form of waste and its existence leads to poor process thinking internally and also perpetuates poor financial performance.

Learning about and utilizing the various tools of lean will certainly aid improvement in a firm's cost performance. If results are tangible, and visible enough, many companies will continue to develop their expertise in lean methodology. This is the state many printers find themselves in today—one of cautiously exploring lean thinking while continuing to run their business in the manner they've grown accustomed to for all the reasons written about above.

Doing Lean Versus Being Lean

We feel strongly there is a substantial difference between "doing lean" and "being lean." Far too many companies in the print industry are falling into the trap of "doing lean" while not undertaking the necessary changes to actually "be lean." Undertaking process improvements using only lean tools runs the risk of following so many other improvement efforts that have fizzled into oblivion after a few years of concerted effort in the print industry. Fundamental improvement requires fundamental change, and this must take place across the entire organization. Printers must be able to address the change management issues listed above and ingrain lean thinking into the core culture of their business model. Printers interested in remaining competitive, and thriving in the future, will embrace lean fully, not merely implementing select tools of convenience. Lean works, lean is not easy, and lean is necessary for print's long-term viability. What is your firm doing about it?

Kevin and Malcolm offer seminars and consult on lean manufacturing through the Graphic Communication Institute at Cal Poly. Contact them for information.

Retrospective

What We Remember

Consultants never remember their bad forecasts. They only remember other consultant' bad forecasts. In terms of my best forecasts there would have to be three. The first is the growth of long perfecting sheetfed presses, second, the growth of UV and hybrid UV, and third, defect detection. The growth of long sheetfed perfecting presses has been outstanding due to many factors, including the ease of two people running most of those presses—

productivity has been key. UV is ramping fast in many markets due to instant dry. The last is the area of defect detection. Nine years ago this technology was just emerging and now many press manufacturers have available. This technology will be accepted widely when prices come down.

Raymond J. Prince NPES RaymondJPrince@aolcom