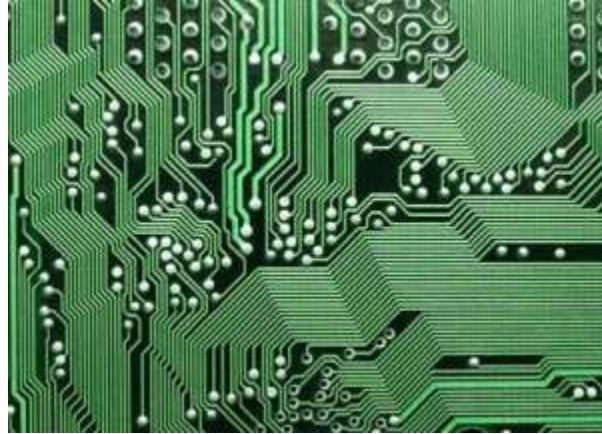


# EXPANDING THE RELEVANCE OF LEAN MANUFACTURING TO DATA



Lean Manufacturing principles yield proven results in operations management with direct benefits for customers. The implementation of Lean processes on the manufacturing floor is hardly new, yet it is still expanding at manufacturing companies to drive improved performance in quality, cost, and product delivery to customers. As an example of what can be accomplished at a major manufacturing company, Lean improvements made on our large format printing operations have reduced production cycle times by 15% and significantly decreased costs across the product set.

Across the industry, Supply Chain teams are shaping change by driving Lean principles through our data management and purchasing systems. Similar to the impact of reducing physical steps in the manufacturing process, removal of unnecessary data transfers, entry, and validation yields important benefits both internally and externally.

Fewer data management points significantly decreases the opportunities for errors (and their associated costs) as well as reducing the processing steps that need monitoring. The greater the complexity of the businesses supported, the greater the need for Lean business processes.

Many contract manufacturing companies, such as The Coghlin Companies, support the complex manufacturing requirements of a diverse and global customer base.

The profile of work on any given week might include manufacturing large capital equipment, or precise requirements to produce a high mix of printed circuit board assemblies. The management of the materials in support of these profiles include planning, purchasing and handling of approximately 60,000 unique part numbers.

This type of volume might require about 500 different suppliers, shipping product into facilities via 7,000 purchase orders (PO) requiring approximately 50,000 systematic transactions (PO placement, confirmation, receipt, stocking, kitting, etc.) before a finished good is shipped. Mistakes or delays in any of these transactions for any of these parts could delay shipments and increase costs.

Fewer steps in the manufacturing process can also make it easier to identify areas for improvement, or quickly pinpoint the culprit if a step should go wrong. A Lean data management system can also streamline your business analytics. For example, the points become more meaningful when examining Return on Investment or evaluating the effectiveness of specific steps in the manufacturing process.

The implementation of Lean theory to optimize the processing requirements is a critical part of continuous improvement. An organization's Supply Chain team, working closely with its supply base, should be on a mission to focus requirements on reducing steps and thus margin of error.

Some of the ways I have observed this type of continuous process improvement include:

- Automating demand signal transfers from our firm into the supply base
- Removing manual data entry at both the firm and the supplier
- Matching the processing steps to the physical flow and practice (e.g., Kanban parts don't flow as Manufacturing Requirements Planning [MRP] planned parts)
- Automating routine transactions, and
- Implementing monitoring metrics to flag exceptions and track performance.

Lean manufacturing is hardly a management improvement "fad." It is a never-ending journey that holds the keys to achieving current and future performance improvement on a go-forward basis. On-going initiatives to develop Lean data practices continue to contribute to the achievement of manufacturing goals for improved quality, delivery and cost performance.

The focus on Lean data practices in our supply chain is just one example of how Lean initiatives still benefit companies and clients in profound ways – now and in the future.

Source: <http://www.aprison.com/blog/2013/08/the-continued-relevance-of-lean-manufacturing-2/>