

APPLYING LEAN CONCEPTS TO ELIMINATE NON-VALUES ACROSS THE SUPPLY CHAIN NETWORK

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Overview

If ever there was a time for a business to be lean, it's now. Lean concepts have become significant factors and a powerful force for radically transforming hundreds of companies. Its impact on business performance is beginning to be felt, and will be a major factor in the future success of supply chain improvement efforts.

What difference can lean make to a business? A major analyst group reports that best-in-class manufacturers averaged the following performances:

- 98 percent on-time delivery
- 93 percent overall equipment effectiveness
- 5 percent inventory costs as a share of revenue

When compared to other companies, these leaders are:

- 121 percent more likely than laggard firms to have expertise in lean at the executive level
- 150 percent more likely than laggards to be sharing best practices across the enterprise
- 206 percent more likely than laggards to be extending lean to supply chain

Lean Supply Chain as a Modern Improvement Technique

The lean supply chain is defined by the Council of Supply Chain Management Professionals (CSCMP) as a set of organizations directly linked by upstream and downstream flows of products, services, finances and information that collaboratively work to reduce cost and waste by efficiently pulling what is needed to meet the needs of the individual customer. From our perspective, the concept includes:

- **Perfect first-time quality** — Zero defects, revealing and solving problems at the source
- **Waste minimization** — Eliminating all activities that do not add value or create unnecessary safety nets
- **Continuous improvement** — Reducing costs, improving quality at the source, increasing productivity and using information sharing to find optimized conditions
- **Pull processing** — Products are pulled by consumer demand
- **Flexibility** — Producing different mixes or greater diversity of products quickly, without sacrificing efficiency at lower volumes of production
- **Building and maintaining** — Building long-term relationships with suppliers and customers through collaborative risk sharing, cost sharing and information sharing arrangements

Companies that foster lean put customer satisfaction first. They view data exchange between partners as a tactical advantage and treat employees as valued assets. They have active, continuous improvement programs, collaborate with supply chain partners on innovative process standards, and enforce company product standards with the industry and partners. Features include visibility to what is actually happening across the enterprise, access to information at the point of need, and synchronization of supply chain processing to eliminate failures and re-manufacturer or re-shipment.

Lean Fits the Current Economic Turmoil

The current economic conditions are introducing new demands on business almost faster than they can be met. The new economy is calling for innovative alliances, shared value propositions, real-time visibility, perfect order management and, most of all, mutual success. It's a market-driven, customer-satisfying environment where failures lead quickly to loss of revenues. In such an environment, lean becomes a solution when combined with other best practices across a supply chain. Supply chain mastery is enhanced and leads to: quick response without increased costs, accurate and online data documenting of what is actually happening across the enterprise — one version of the truth — and metrics that help drive the right decisions.

Elements that make a difference with lean involve value stream mapping to pinpoint the areas offering potential for improvement, set up and changeover reductions to best possible standards, kanban techniques to move materials only when needed to the point of need, and meeting impeccable safety standards. Lean focuses on speed across the value stream, waste elimination throughout the processing and ridding the system of non-value-adding actions. It applies information technology to provide the kind of accurate facts that lead to deployment of the right improvement tool to opportunities most critical to performance and customer satisfaction. It leads to accurately specifying values by product and service so offerings can be matched with a customer segmentation needs analysis.

The extension of lean concepts across a complex supply chain network of suppliers, customers and partners can result in dramatic financial improvements for all. Significant benefits in reduced cycle times, increased production yields and quality levels, decreased inventories, minimized waste, lowered costs, and increased customer satisfaction are to be expected, which in turn drive increased revenue and improved operating margins. Lean supply chain operations require continual optimization, monitoring and refinement which cannot be accomplished without a solid IT platform. As backbones and data repositories, traditional solutions such as enterprise and supply chain planning applications can be essential for enabling a holistic, lean manufacturing operation.

However, many lean purists hold that traditional IT applications such as ERP, by definition are anti-lean — using push logic to populate the manufacturing operation with materials, rather than pulling actual customer — demand-driven inventories to create a continuous flow environment. Applying standard costing and least total cost logic will often drive decisions that prove to be counterproductive if the impact of the total supply chain is not considered.

Lean supply chain projects take time and as companies grow, challenges must be overcome. However, many components of an extended lean enterprise can add significant value in relatively short periods of time. To do so, companies need tightly integrated and highly functional solutions that can manage and execute long running, event-driven business processes across the enterprise. Using supply chain management solutions enables functional business process capabilities and service oriented architecture to provide the business processing platform to deliver that functionality.

Combined, supply chain management and lean solutions create a platform for contemporary logistics. This platform will open new doors of opportunity for companies to drive additional revenue while decreasing supply chain costs. These improvement areas range from the very short term to the strategic:

Tactical Benefits

Implementation of supply chain management/lean solutions allows for efficiencies to be gained across discrete supply chain processes, such as warehousing, supplier and manufacturing plants, and logistics and transportation operations. Benefits include increasing overall labor productivity and order accuracy while decreasing inventory and labor costs throughout the supply chain.

About CSC's National Supply Chain Practice

Our Supply Chain Practice is among the first dedicated supply chain practices, with a rich heritage built on specialist consulting firms in logistics and manufacturing. Our comprehensive portfolio of offerings spans product design through aftermarket service and related business metrics. As a thought leader in complex supply chain transformation, we introduced critical thinking around intra- and inter-enterprise supply chain optimization. To identify emerging trends and opportunities for the supply chain industry, we collaborate with CSCMP, Michigan State University, Supply Chain Europe magazine and SCMR magazine to conduct and publish the Annual Global Survey of Supply Chain Progress, now in its seventh year.

Innovative Opportunities

Supply chain management/lean solutions allow companies to think outside the box and realize opportunities that may not have been previously achievable. Initiatives may include: direct store delivery programs, shared services, multi-channel distribution, or migrating from a pre-paid to a collect model for transportation to drive down transportation costs.

Evolutionary Initiatives

Companies take business performance to new levels with supply chain management enabled with lean techniques. In today's environment of better, faster and cheaper, companies must look for ways to streamline business processes and focus on core competencies to drive customer value — this may mean outsourcing initiatives or off-shoring manufacturing.

Inventory Reduction

A key principle of lean is reducing inventories to the bare minimum. The effort to do so turns out to be powerful in finding waste and inefficiencies throughout the supply chain. A business process platform is useful in this endeavor as it coordinates the supply chain so that each participant is only producing what is actually being used at the next stage — not what they expect to use. The result is smaller lot sizes and frequent deliveries, resulting in low levels of inventory throughout the supply chain.

The bottom line is that supply chain management can be enhanced through application of lean concepts and techniques. The result is a solution for transforming a company in difficult economic times. Rather than give into troubling circumstance, the leaders are using the current environment to get lean and rid themselves of everything that does not add value.

To find out how we can help your organization apply lean concepts to eliminate non-values across your supply chain network, please contact:

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The company trades on the New York Stock Exchange under the symbol "CSC."