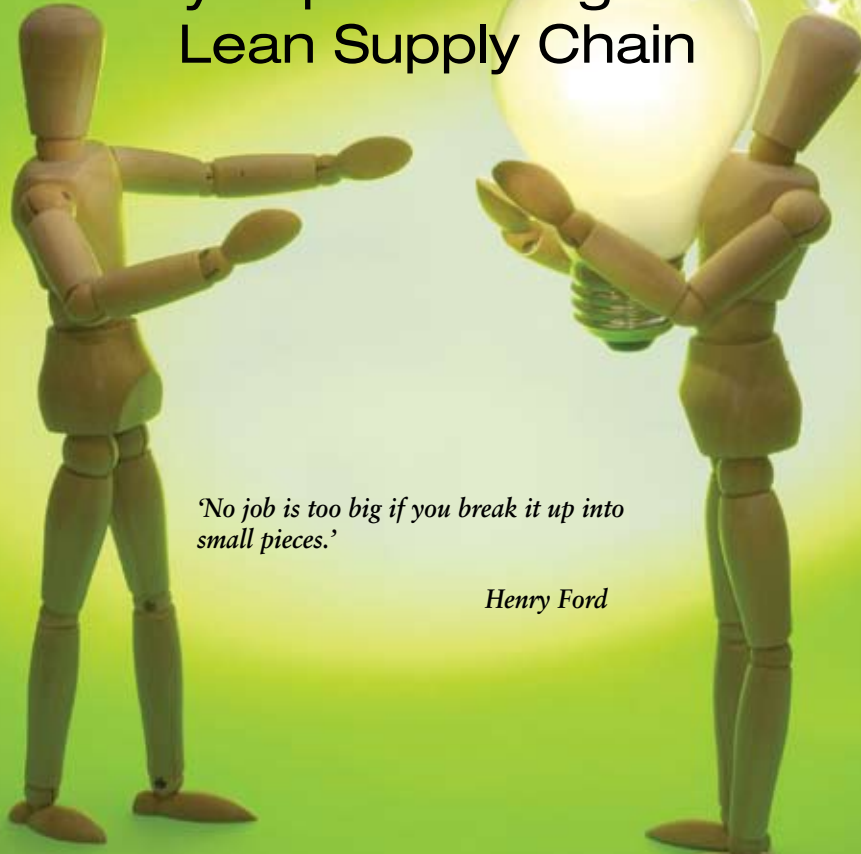


Theory of Base6[©]

Successfully Implementing the Lean Supply Chain



'No job is too big if you break it up into small pieces.'

Henry Ford

This is the third in a series of three articles by Robert Martichenko, President of LeanCor LLC in Florence, Kentucky, with contribution from Dr. Thomas Goldsby, Associate Professor of Supply Chain Management at the University of Kentucky in Lexington, Kentucky.

Theory of Base6—A Review

In Part I of this series of articles, which ran in the May/June 2006 issue of *CSCMP Supply Chain Comment*, we discussed how six common themes exist within all major initiatives that have been implemented by companies over the last 50 years. We call these themes the Theory of Base6,[©] and they're listed below:

1. Customer Focus
2. Vision Deployment
3. Process Management
4. Teamwork
5. Quality at the Root
6. Continuous Improvement

In the second part of our series, which ran in the July/August 2006 issue of *CSCMP Supply Chain Comment*, we talked about the importance of process, recognizing that there are three types that exist. These processes are:

1. Value-Added Processes: Defined as any process the customer will pay for.
2. Non-Value-Added Processes: Defined as any process the customer will not pay for.

3. Business Value-Added Processes: Defined as any process the customer will not pay for, but cannot be eliminated from the process at this time.

From here, we need to ask ourselves, "How does this knowledge help my operation?"

Implementing the Base6

The Base6 can be used effectively to solve any business problem. For example, let's begin with a process we know, transportation management. The question we need to answer is: "How can the Theory of Base6 help us improve our transportation management processes?"

Transportation Management and the Base6

Customer Focus

It's absolutely critical in any problem-solving situation to understand a process from the customer's point of view. For transportation management, this can be accomplished by answering the following questions:

1. What are the customer's expectations of your transportation performance?
2. What is the customer's perception of your company's transportation performance?
3. What is the gap between your customer's expectations of performance and his perception of the performance he receives?

The gap between a customer's expectations and his perceptions is where your company's leaders should be focusing their attention.

Example

A manufacturer of consumer goods had a large customer who was completely dissatisfied with its delivery service. Through discussions, the manufacturer learned that the customer was expecting scheduled deliveries and transportation visibility. This led the manufacturer to stop using the lowest-cost carriers and began working with premium carriers, ultimately improving service and gaining more business from the customer.

Vision Deployment

Completing a **voice of the customer** exercise will lead to required changes in business processes. However, any significant change will require vision, execution, and tactical plans that will need to be cascaded through an organization. In other words, changes to logistics processes must be a company-wide effort. Without this corporate effort, real change will not “stick” because logistics functions span across many functional areas and, therefore, require cross-functional support.

In the example on page 16, when the consumer goods manufacturer began using premium carriers, transportation rates, in fact, did increase in the short term. Changing carriers required full support from all levels of the organization because budgets would be off, and some employees' compensation was tied to the budget. Senior management approved the change, and it was deployed through to the carrier selection process. Note: Once the transportation network was stabilized, a separate initiative was launched to reduce transportation costs through productivity measures, not simply getting lower rates.

Process Management

At this point, we know what we need to do (from the customer perspective), and we have full corporate commitment on the vision and corresponding tactics. The next step is to face realities. In other words, how do we do our work? To understand “process” requires a process itself. This begins with understanding the concept of the “value stream.” The value stream is the flow of value-added processes that ultimately result in satisfied customers. Known as the value stream map, we identify certain key characteristics relative to process and value. The key process characteristics are:

1. What processes exist to satisfy the customer?
2. How many of these processes are value-added from the customer's perspective?
3. What projects need to be completed to eliminate all process waste, which is represented in the form of non-value-added processes on the value stream map?

Continuing with our example, the value stream map showed that significant transportation lead time was attributed to carriers picking up trailers and dropping them in their yards. At times, trailers would go missing and deliveries would not be made. The value stream map also identified the 'moments of truth,' where visibility is required. These included: point of pick up, when the delivery appointment was made, a minimum of two milestones while goods were in-transit, and point of delivery.

Teamwork

Once improvement projects are identified, the right team needs to be assembled to effectively execute the focused initiatives. This requires the right people with the right skills and the right authority to ensure results. To put together the right team requires a number of people, from senior management to operational-level team members.

In the example above, the team assembled to implement new carrier processes included the director of supply chain, transportation manager, distribution center manager, comptroller, two dispatchers, and a representative (operations personnel) from three carriers. Each person had a specific role and set of responsibilities.

Quality at the Root

Waste in process starts in the form of process errors, and these errors turn into defects when they're passed on to the customer. Defects represent one of the worst forms of waste as they create re-work and unwanted inventories with all the associated inventory-carrying costs. Consequently, we need to focus on **quality at the root** to identify and eliminate errors before they become defects.

When the process was analyzed in the above example, it was discovered that most transportation failures were caused by carriers not responding to load requests that were faxed to them from the manufacturer the day the load needed to dispatch. Consequently, the manufacturer redesigned the load request process using online tools, which gave the carriers 24-hour notice about loads. It also required the carrier to electronically accept loads and to notify the manufacturer when a truck had been dispatched. In the event that a truck was not dispatched on the load within one hour of pick-up time, the system would set off an alarm, notifying the manufacturer's dispatch office.

Continuous Improvement

Waste in process is similar to a growing organism in that waste wants to grow. Therefore, once we make an improvement in process, we need to ensure that this improvement is sustained. If we don't, it is a certainty that the waste will reappear. The most effective method to apply to a process that has been improved is the Plan:Do:Check:Act (PDCA) cycle. Simple in concept, the PDCA cycle merely requires discipline to regularly review the state of the improved process.

Completing our example, each day, the manufacturer had a documented plan that outlined the number of loads to dispatch and what deliveries were scheduled to customers. For the first three months, the implementation team met via a daily conference call at 4:30 pm to go over the plan versus the actual condition. Any deviations from the plan were analyzed for the root cause of failure, and action steps were put in place for implementation on the following day.

The Base6 – Getting Back to Basics

Getting back to basics is straightforward. Highlight and identify a specific problem that exists in your operation. Using this problem, follow through with the Base6 to eliminate waste from your operation, improve customer satisfaction, and increase profitability. In the end, brilliance in business has a lot to do with a disciplined execution of the basics. ■

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