



Lets Talks about Lean Manufacturing and JD Edwards

By John Paulson, Sr. JD Edwards Consultant / Manufacturing Specialist

Many of us have experienced the value of lean operations and understand what it takes to be a 'lean enterprise'. However, only a small percentage of companies are successful "lean enterprises." Numerous companies have tested the waters with lean, but are hesitant to jump in. Others fear change. In my 25+ years in manufacturing and visiting some of the nations leading manufacturers, I have seen the impressive results of lean conversion, in both large and small manufacturers. It's not rocket science, and can be done in small increments, but it is a change in the way we operate from tradition. I have found that a change from traditional operations is the challenge for most companies. Understand it is not a cure-all that you implement once for immediate results; it is a continual process of improvement and repetitive study in operations. For many, it is a completely new way of thinking, a new way of life in manufacturing operations, in order to maintain, or improve, your competitive edge in operations.

Do you need special software or hardware to make it happen? No. I have implemented lean concepts to manufacturing operations with limited ERP system functionality providing positive results. However, your JD Edwards EnterpriseOne Lean Execution provides some very nice features you can leverage to optimize your lean initiative which we'll talk about this later in this article.

What does it take to be a success at lean manufacturing?

1. Stop thinking about it, and start doing it! ..and you don't need a team of consultants to make it happen. Chances are, in this current economy, your operations are not running at full capacity giving your organization the opportunity to place resources on your lean improvement initiative. Now may be the best time.
2. Understand your current business processes, chart it out, communicate it to the entire team. Let the team pick it apart. Expect many revisions and adjustments until you get the final result. You'll be surprised how valuable this chart will be.
3. Choose one element of the process to incorporate lean, such as materials. One important lean element is to eliminate "push" production for a "pull" system. In other words, you should strive never to produce finished goods to fill a forecast or warehouse minimum/ maximum, but only to fill customer orders (the ideal situation). When you base all of your production on the pull of a customer order, you eliminate waste, excess inventory and many other issues. Start eliminating the waste associated with work order management by utilizing back-flush concepts.

Or within manufacturing for instance, you can incorporate lean to a production line. Start at the beginning and follow a piece or pieces through the process, and time it, recording the time taken by every step, and the times in between where parts or completed products sit idle, as work in process or finished-goods inventory. Be sure to record any times where your people or machines are idle, waiting for work to cycle to their step in the process. At the end of this exercise, you will likely end up with some surprises when you measure the time where value is added to your product or process against idle time, or time spent in activities such as materials handling or inventory buildup.

4. List ALL ideas; Soon, your team will quickly generate ideas about how to improve the flow and efficiency of your operations. This brainstorming will help the team expand on ideas from other team members, and generate additional creative ideas.
5. Once your team understands the current state, begin to map out an ideal "future state" where the team can eliminate the wasteful steps in the process. This future state gives the team a goal to work towards.



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6. Once the team mapped out the future state, you can begin scheduling improvement initiatives to reduce waste in the process. Once the specific improvement initiative is completed, monitor, and move on to the next improvement initiative and begin the cycle again. It's a never ending process.

Small successes to start are important. Begin the 'hit list' with attacking the low hanging fruit first. For instance, spend a week on finished goods inventory, and trim down the waste there. Later, spend a week reducing work-in-process inventory, then a week improving the flow in your process by moving machines or processes around. As you work through these events, you will slowly make progress toward your ideal future state.

With JD Edwards EnterpriseOne Lean Execution, you can implement lean practices to one manufacturing line, or even one feeder line at a time. JD Edwards EnterpriseOne Manufacturing lets you run your plant based on your requirements utilizing the EnterpriseOne mixed-mode manufacturing functionality for process, batch, or discrete environments, or a combination of the three.

Start eliminating the administrative work of work order management by utilizing JD Edwards multilevel back-flush system. Utilizing JD Edwards multi-level back-flush will move you in the right direction for lean improvements.

Features in JD Edwards EnterpriseOne Lean Execution include;

- Complete end item and related sub-assemblies through a single user request
- Material and labor reporting for all levels of components with multi-level backflushing
- Based on 'Pull' production, not 'Push' production
- Integrated mixed mode flow manufacturing
- No work orders required
- Native to JD Edwards EnterpriseOne Manufacturing Management Modules
- Kanban setups

While working through your lean initiative tasks, an important thing to understand when reducing inventories; many problems will rise to the surface. For instance, quality issues that are shrouded by excess inventory will rise quickly to the top as these inventory buffers are exhausted. The important lesson here is to understand that each new issue is a learning opportunity, where you solve the problem by digging to the root cause to avoid the same problem from arising again in the future. Establish standardized work-flows to build quality in the process.

Also note; lean is not just for manufacturing operations. Lean can be incorporated throughout the organization, and throughout the supply chain. And remember, your people are an important asset in the lean initiative.

If you would like to learn more about how to bring lean practices into your operations, and how to leverage your JD Edwards system with lean manufacturing, contact John Paulson at jpaulson@jderesource.com.

At CTCI's JDE Resource Service, we have the lean manufacturing specialists on board who can provide guidance and knowledge transfer at any level required to get your lean manufacturing team in the drivers seat and moving forward.

To find out how CTCI's JDE Resource services can assist your organization with your JD Edwards needs and improve your operations, call us at 1-877-828-0074 or email info@jderesource.com