



Electronickanban

In a recent interview with Thomas R. Cutler, Ben Ehmcke of Power Partners, Inc. details his experience in technology selection and offers valuable advice to others in a similar situation

“Your problems are not going away just because you have a new piece of software. Training and follow-up are essential,” says Ben Ehmcke, director of supply chain for Power Partners, Inc. “Start out small and grow. Select a supplier who can make it work. Then use this supplier as the example and reference for the others.”

Power Partners, Inc. is the thirteenth largest US firm in the Women’s Business Enterprise National Council (WBENC), manufacturer of poletype distribution transformers that provide more than three thousand utilities in North America, Central America, the Middle East, and Asia with electric power for homes and businesses, (although company in not currently shipping units to the Middle East or Asia).

Power Partners’ poletype distribution transformers are specifically designed to serve residential overhead distribution loads and are suitable for light commercial loads, industrial lighting, and diversified power applications. Its operation in Athens, Georgia, has achieved ISO 9001:2000 certification and has over fifty years of manufacturing experience, having been an ABB facility until Power Partners purchased it in May 2003.

Several unsuccessful attempts at lean manufacturing and vendor managed inventory led to excess raw material and WIP (work-in-process.) Wikipedia defines work-in-process as “an asset that means the portion of work that is complete but not yet billed. WIP is a good or goods in various stages of completion throughout the plant, including all material from raw material that has been released for initial processing up to completely processed material awaiting final inspection and acceptance as finished good inventory.” In truth, WIP is often a source of waste, and something lean operations are keen to eliminate.

Power Partners’ problems were compounded by inaccurate data in

the ERP (enterprise resource planning) system and the inability to locate material within the plant. To address these problems, Power Partners developed a card-based kanban system to signal material replacement actions for many of its materials.

“We started out trying visual systems, such as a simple two-bin system, that could be managed by the material handler,” explains Ehmcke. “This system involved marking off an

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area in receiving where wire baskets or boxes of material could be stored. The material handler on day shift was given a preprinted sheet for that supplier. He would take the sheet and place an ‘X’ in each box to show the inventory on hand, and then fax it to the supplier. The material would then be delivered at a predetermined time. The next step was to put up kanban boards for several commodities. As material was received, a recyclable card was placed on each standard package quantity. When material was moved from the staging area to WIP, the material handler removed the card and replaced it on the visual board. The board would also show what was on order and when it was received.”

The company’s manual kanban system was well documented, yet had two basic flaws. Firstly, the company considered material handling to be an entry-level

position, and anyone who excelled at it was soon moved to a more skilled position. It was difficult to maintain the system when there was a constant change of personnel and training was minimal and secondly, there were just too many people handling the material. “We were astounded to find out there were up to thirty-eight different people from just one department that touched the material,” notes Ehmcke.

Power Partners needed to find a system where the material handler could perform the basic job function, and still get the information into the ERP system and to the supplier. “Our objective was to have a system based on actual usage versus the information from an ERP system,” Ehmcke reflects. “Previously, I had been involved in developing true kanban systems that allowed us to turn off the ERP system for procurement decisions and was looking for software that would be compatible with our ERP software, and give us the flexibility and functionality that I had experienced with other systems.”

Power Partners did not have the resources to develop a demand driven supply chain solution internally, even though the company’s owners had a business associate that wanted to develop a system for small to medium-sized companies. They had the resources to write the software, but had no knowledge of kanban or lean. After several months of working together, it became evident that the project would take much longer than Power Partners wanted, and was much more complicated than the business associate anticipated. The company started looking for software solutions that could be integrated with their ERP system and grow accordingly.

Sherrie Ford, Power Partners’ chairman of the board, met representatives from Datacraft Solutions at an AME (Association for Manufacturing Excellence) conference and the company started a year long



evaluation of the Signum Demand Driven Supply Chain product. At the end of the evaluation, Power Partners selected this SaaS (software as a solution) technology.

“Datacraft Solutions had most of the features that we looked for in a system. Signum was user friendly to both the buyer and to the supplier. It enabled us to put in place an electronic communication back to our supplier, and at the same time was transparent to shop floor personnel. They provided a team on site that developed the interface to our ERP system, and trained both Power Partners personnel and our suppliers.”

Ehmcke was confident that with a demand driven supply chain system, PowerPartners would realize immediate benefits by reducing inventory and cutting supplier lead time. “We knew that with this type of system we could reduce our on-hand inventories, and by offering our suppliers consistency

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we would reduce our supplier lead time. Within the first three months, we cut the inventory levels of the first two suppliers in half, and reduced lead times from four weeks to ten calendar days. Subsequently, we have achieved similar results with the other suppliers. In addition, because this solution is interfaced with our ERP system, we have improved our transaction accuracy.”

The company started out with three key suppliers on the new system and during the last year added five others; by the end of the project the company expects to have all suppliers using Signum. Power

Partner suppliers regularly communicate that the flow of information is far greater than they have received from any of their other customers and that Power Partners is way ahead of its competitors as far as ease of doing business.

Ehmcke has some advice for other companies that are considering a demand driven supply chain system. “There are several things that any company must consider before they start down the road to a demand based system. Is your own house in order? Are you looking at this to solve all your problems? Do you have the backing of the upper level management, or is this something that was handed to you to implement? Without the commitment from everyone involved in the project, you will not get off first base. In our case, we made sure that we started in an area where we had complete control. By doing this, we established an instant success story so that other areas would come to us to find out what we did.” ■