

High Impact Projects

A Newsletter About Getting Important Things Done.

Inventory Reduced by \$262,000 while Simultaneously Improving Customer Service

Team Accomplishes Dramatic Improvements with only \$50,000 Investment.

Nearly Identical System in Another Department Fails to Produce Results

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A Farmland Industries plant in Kansas City, Kansas decided to implement some new technology. In the Paint division, a modest investment of some \$50,000 resulted in a dramatic inventory reduction, overhead cost savings and improved levels of service. 300 yards away the Battery manufacturing department in the same plant attempted to implement an MRP (Materials Requirements Planning) system to reduce costs and improve production – The Battery project failed.

What can account for such a dramatic contrast in results in the same company? Some 5 years after the systems were implemented, I went back to Russ Baker, Director of Purchasing for Farmland at the time, to ask why the difference. Following are some lessons learned that may be of use to you.

User Buy-In – the Key Ingredient: Baker explains that, “The Paint manufacturing system worked like a charm! The users bought in. It became theirs. They put forward the effort to convert from a manual recipe (bill of materials) system to automated formulas in the software.”

“The users committed themselves to accurate data entry, which resulted in savings in materials, reduced safety stocks and improved turns. Their efforts resulted in a system they could trust.”

“The Paint department was actually able to move to a ‘just in time’ purchasing model, which resulted in large inventory reductions.”

What went wrong with the Battery manufacturing system? “The Battery MRP system never got off the ground,” Baker comments. “It was too complex. We were trying to force high-tech ‘stuff’ onto people with an old-line manufacturing attitude. We had no buy-in or input from the people in the manufacturing areas doing the work.”

Baker continues, “There was also some scar tissue from previous projects and people were slow to believe any real change would happen. The Battery MRP system, because it was more complex, took longer to implement. The plant was purchased and actually shut down before the system could ever deliver it’s full benefits. We also lost our technical champion. We had only one technology guy, and he was ‘carrying’ the project. He was actually the driver of the project and, unfortunately, I had to dismiss him for some improper conduct. Losing him devastated the effort, but we had no choice.”

THREE-YEAR PAYBACK FROM A \$50,000 INVESTMENT

\$350,000 avg. inventory * 25% reduction/yr. * 3 years = \$262,000 inventory reduction

60,000 gallons produced/yr. * \$0.125 overhead reduction/gal * 3 yrs. = \$22,500 overhead reduction

User Buy-in As The Key: The most visible difference between these two projects was the attitude of the teams that actually had to work with the new system. In the case of the Paint manufacturing system, the managers and line people obviously wanted something better. They were willing to commit to it and their input was listened to. Perhaps the most telling indicator of user buy-in was that the inventories were accurate and resulted in a Paint manufacturing system that could be trusted.

In the case of the Battery MRP system, one technology champion was the driving force behind the project. The payback potentials in the Battery division were probably substantially better than in the Paint division (it was larger). On paper this implementation made sense, but the technology champion was in the position of pushing the project forward on his own.

The managers in the affected areas did not buy-in, provide input and engage. In all probability the system never would have been implemented successfully because of this lack of user buy-in. When the technology champion was dismissed, the project simply collapsed for lack of support. We must remember that operating personnel have enormous demands on their time and they need to believe that a new system or initiative will benefit the company – or they will prioritize their time working on something else.

Produce Rapid Results: Another reason that the Paint manufacturing system was successful was that it produced results in a short enough timeframe to merit continued attention and necessary funding. An effort like this can be broken up into several manageable chunks that can be implemented in three months or less.

Automating the recipe formulas (bills of material) was one initial chunk of work. Taking accurate inventories was another chunk of work. The Paint manufacturing system included scheduling software and purchasing software, which could each be implemented gradually. Each of these "chunks" of work were discreet and doable projects in themselves. In fact, several of them (particularly automating formulas) would produce

justifiable benefits if the system never got fully implemented.

Avoid the Big Bang Approach: I have seen dozens and dozens of projects devastated by attempting to do too much too quickly. The Battery MRP system project attempted to do too much (regardless of the timeframe). The Paint manufacturing system approached the project in reasonable, manageable increments.

Again, it is important to remember that the primary people that have to be involved in implementing and using new systems have "real jobs" to do. We must think through the demands on their time and help them find ways to get their normal workload accomplished while they are assisting with the system implementation. This might include hiring temporary help to offload lower level tasks, bringing in colleagues from other departments, etc.

The Big Bang is particularly dangerous when using external software vendors and consultants. Usually, when you are presented with a "Big Bang" proposal, you will be expected to accept on faith that the consulting or software firm can accomplish the proposed changes in the specified timeframe. In practice, we know that Big Bang projects are usually very late (if ever completed.)

A far better way is to require the vendor to break the project up into measurable "chunks" that can be observed and signed off by a non-technical businessperson.

Summary of Results: As mentioned above, the Paint manufacturing system resulted in inventory reductions, improved accuracies in inventory reports, savings in materials, reduced safety stocks, improved inventory turns, "just in time" purchasing and, perhaps most importantly, a system that the people doing the work could trust. Automating the formulas produced significant labor savings on its own and, overall, overhead was reduced on a three-year basis by some \$22,000. (Not bad for a \$50,000 investment!)

Call us if you have questions or would like more information. This case is written as a teaching tool and is not intended to fully describe exact details or dialog.