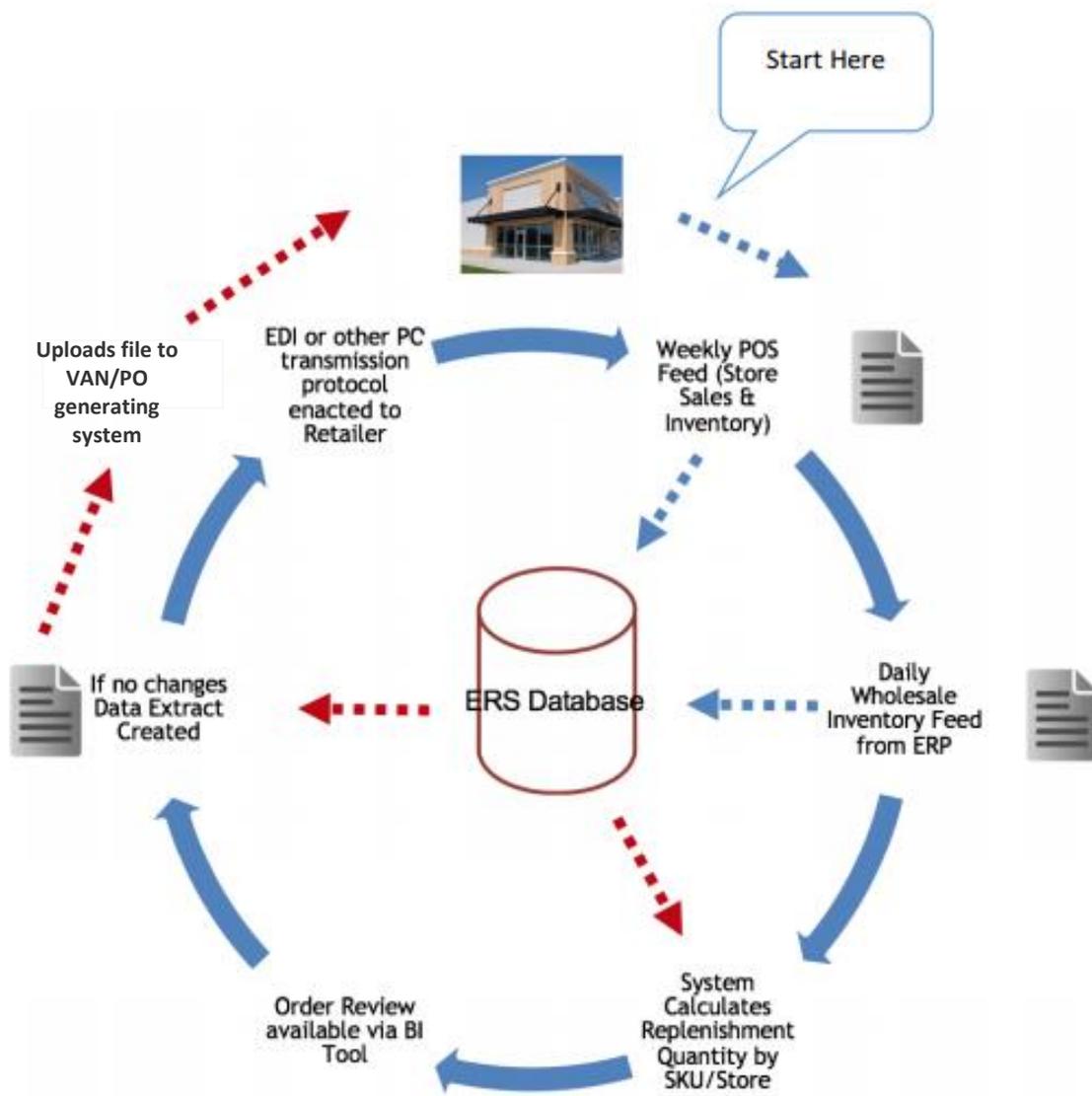


## Case Study: A VMI Victory

### Overview

A global manufacturing company contracted Enhanced Retail Solutions (ERS) to implement a Vendor Managed Inventory (VMI) system for their pant program at BJ's. The pant program contains one style with four colors, totaling to 60 UPC's. The manufacturer was not able to efficiently implement VMI because of resource limitations. They then reached out to a longstanding and trusted partner -- ERS. ERS has experience with replenishment and VMI through multiple retailers including RadioShack, Frye, American Apparel, and vendors for Walmart, Target, Belk, Kohl's, Bloomingdales, and Stein Mart. To this day, our clients' solutions are quick, accurate, and flexible due to ERS' expertise and knowledge.



### **What is VMI?**

Vendor Managed Inventory is a collaborative business model where the manufacturer, instead of the retailer, takes on the responsibility to monitor their product's sales and inventory levels at each store. The retailer provides product activity via an EDI 852 to the vendor for comparison against retailer's ideal inventory levels. Once the vendor has this information, they integrate it with their wholesale inventory to determine their production need, the retailer's replenishment need by store, and the reverse PO.

ERS helped the manufacturer implement VMI through these steps:

1. Retrieve Data
2. Calculate Replenishment & Production
3. Adjustment
4. Finalize & Ship

### **Retrieve Data**

To make VMI possible, two datasets are needed: BJ's POS data and the manufacturer's wholesale data. The POS dataset must include UPC, units sold, and on hand units by each BJ's retail store. The wholesale dataset must include available to ship (ATS) and work in progress with their respective completion dates.

Enhanced Retail Solutions' system was designed to be customizable for an individual customer's needs. The manufacturer can set specific parameters, such as:

- Target WOS model
- Number of weeks ROS will be calculated off of
- Store or shipment limitations
- Push scenarios (what to do when not enough ATS is available)
- Lead time

With both datasets available, ERS can now integrate BJ's POS data with the manufacturer's wholesale inventory to calculate BJ's raw replenishment needs and the manufacturer's raw production needs.

### **Calculate Replenishment & Production**

Enhanced Retail Solutions begins by forecasting BJ's sales through a sales curve and a rate of sales (ROS). The system calculates the pant program's long and short-term ROS for a more holistic view. The system intelligently does not include weeks where sales or OH are zero in its calculation as to not penalize a store out of stock. Based on the calculated ROS, the pant program's sales curve, and the client's WOS model, the system calculates BJ's actual replenishment needs for each UPC by store.

ERS then compares the manufacturer's ATS with BJ's replenishment need to determine the manufacturer's production need. The system considers the manufacturer's work in progress as to not overestimate raw production need.

### **Adjustments**

After calculating the retailer's raw required needs, ERS can apply "push" scenarios if constraints exist for the retailer or the manufacturer. This includes limitations regarding Open to Buy dollars, shipment quantities, and store inventory availability.

**BEFORE:**

TAGNAME: ALL ▼

**CURRENT REPLEN ORDER:**  
Units: 46,553  
Dollars: \$1,388,290.00

**Available Open to Buy Dollars:**

**Scenarios:**  
Remove Bottom Stores ▼  
[Run Update](#)  
[Reset to Original](#)  
[Save Updates](#)

**AFTER:**

TAGNAME: ALL ▼

**CURRENT REPLEN ORDER:**  
Units: 1,708  
Dollars: \$49,816.00

**Available Open to Buy Dollars:**

**Scenarios:**  
Remove Bottom Stores ▼  
[Run Update](#)  
[Reset to Original](#)  
[Save Updates](#)

*The raw replenishment need calls for over \$1,000,000 worth of units; however, the available Open to Buy dollars is only \$50,000. When this condition is entered into the system, pressing “run update” gives us the adjusted replenishment capabilities based on the constraint.*

### Finalize & Ship

Order generation and documents differ for each manufacturer-retailer combination. Once the user approves replenishment quantities, the system generates an xml/text file according to a custom schema as required by the VAN or other PO generating system. Next the EDI 855 (and/or any other required documents) is created and transmitted to the retailer. Once this information is passed along, shipping may commence.

### Challenges & Solutions

ERS prides itself in providing specialized service for every one of its clients. When a client wants something altered to meet their specific needs, ERS goes to great lengths to accomplish it. When this manufacturer couldn't get an accurate on-hand inventory for each BJ's, ERS offered to keep a running total of BJ's on-hand count so they could always have the most accurate results possible.

### Conclusion

Here at ERS, we've redefined existing VMI systems in a way that has brought forth immense success for our clients, including this manufacturer. Their program's sales have grown to 2,200-2,600 units per week and continues to flourish. Overall, the combination of ERS' expertise and VMI technology helps alleviate pressure from the retailer and gives the manufacturer more control of their product's success.