

# CAO and Item Level Inventory Case Study



*"Our CAO solution is driven by the necessity of retailers to manage their inventory in the most efficient and cost effective manner by utilizing an integrated system. When implementing CAO, retailers will see immediate benefits from reduced labor hours to gross profit increases."*

Melissa Fox, Retail Solutions Manager, Pinnacle

*"CAO is the best and most important decision we have ever made in this business."*

Phil Settle, Director of Marketing, Flash Foods

*"We are seeing overall reductions in inventory dollars at stores that are using CAO."*

Jenny Bullard, Chief Information Officer, Flash Foods

## Company Overview

### Pinnacle:

The Pinnacle Corporation ([www.pinnacorp.com](http://www.pinnacorp.com)) is a leader in the automation technology industry focusing on the rapidly evolving convenience store and petroleum industries. Pinnacle delivers products that automate the broad spectrum of convenience store operations and supply chain management of fuel operations. Nationwide, Pinnacle's products are used daily in thousands of convenience stores to automate and improve their store operations and fuel marketers to increase their efficiency in the complex management of fuel delivery.

### Flash Foods:

Flash Foods ([www.flashfoods.com](http://www.flashfoods.com)) is headquartered in Waycross, Georgia, and operates a chain of 180 convenience stores in Georgia and Northern Florida. A Pinnacle client since 1996, Flash Foods utilizes an enterprise-wide suite of Pinnacle applications. The Jones Company is the holding company for Flash Foods. It also owns Fuel South, Inc., Distribution South, and Walker Jones Dealership.



## Business Problem

Retailers are faced with the challenge of keeping store shelves replenished not only with the correct products but also the correct amount of products. Mismanaged store inventory can be a serious problem for retailers; often the wrong products are being ordered, higher quantities are being ordered of products that don't sell as fast as others, and not enough is being ordered of the products that do sell.

Overstocks and out-of-stocks can cause major problems in terms of the cost of storing products that aren't moving. They can also cause consumers to go elsewhere when the products they are buying are not available.

The labor costs associated with the manual order process compared to the computer-assisted ordering (CAO) suggested order process are considerably higher and can be greatly reduced when using a CAO system.

## The Solution

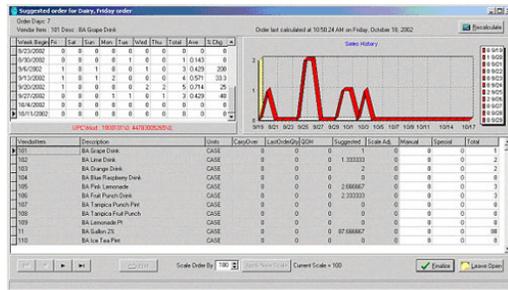
### Computer-Assisted Ordering –

*"Preparing a store order through the use of computers that integrate information about product movement (as recorded by POS systems), outside factors that affect*



*demand (such as seasonal changes), actual inventory levels, product receipts and acceptable safety stock levels.”*  
 - CAO Best Practices Subcommittee

Pinnacle's Oasis Manager Workstation™ (OMWS) CAO module is an inventory replenishment system which can use either sales or inventory algorithms to prepare a suggested re-order. Pinnacle's CAO is proven to significantly reduce the amount of labor hours associated with creating a manual re-order; and to improve merchandise inventory levels to significantly improve retailers' bottom-line.



## How CAO and Item Level Inventory Work Together

*Perpetual Inventory System* - Before implementing a CAO solution, an item level inventory process must be in place.

Receiving inventory by item, making adjustments to inventory at the item level, scanning and selling at the SKU level, and regular inventory audit counting using the Symphony Handheld inventory auditing solution should all be in place if CAO is going to be successful.

The CAO solution will use all of the item information captured at the store together with the ordering criterion for each item to intelligently suggest a re-order.

**CAO Process** - The ordering calculation tools available in the Pinnacle CAO module allow retailers to develop data matrices to evaluate product sales over variable periods to account for variances depending on situations or seasons. Minimum required stock-on-hand rules can be set up that CAO will automatically use in conjunction with available stock data maintained in the system. CAO then automatically recommends orders, which can be evaluated and confirmed by store personnel and immediately transferred to vendors. This automated process reduces the time store managers dedicate to the inventory management and ordering process. Once the CAO module has been set up, there will be less inventory but out-of-stock issues will be avoided.

When configured to use the sales history ordering methods, the CAO module uses the POS Journal Manager transaction data in order to include the time of item sales in addition to the daily amount. When configured to use build-to or reorder point ordering methods, no sales history is used by the CAO module.

Orders can be exported in the PCATS NAXML format for vendors who are compliant, as well as to open orders for receiving through the Invoice Entry application.

In conjunction with CAO, a Vendor Scheduling module has also been added to the OMWS mix. Vendor scheduling is used by CAO to determine

when deliveries for a particulate vendor are expected so that the proper order calculations can be determined. Vendor Scheduling can also be used by non-CAO users to track vendor schedules for labor scheduling purposes and to log vendor exceptions and reasons why vendors have not delivered an order on time.

## Case Study - In Practice

With all the challenges of mismanaged inventory facing them, Flash Foods found it was fertile ground to make an operational change and to implement CAO. The executive team members at Flash Foods understood that in order to make CAO a successful implementation, they would need to be mindful of some key factors:

- To ensure a successful outcome would require a commitment from all levels of their organization.
- They needed to make an investment in a system that would allow them to create ordering algorithms that worked for them and fit into their existing item-level inventory processes.
- It would also require an investment in their own resources in terms of configuring the system and training their store personnel.
- To be successful with CAO, they would need to be disciplined in ensuring that all items, down to the exact product SKU, were being tracked appropriately through the entire supply chain, from point of entry in their Price Book system to scan out at the POS.

By making the right decisions on these

key factors and by staying on top of its implementation and alert to its goals, Flash Foods was able to implement CAO and immediately saw results that saved time and money. According to Jenny Bullard, Chief Information Officer of Flash Foods, the CAO rollout has been very impressive. She says:

*"Using the item-level inventory module within Pinnacle's OMWS has allowed us to extend the CAO process to all categories in our stores for items ordered from our distribution center. This inventory module gives us a perpetual day to day inventory by the item. Using that inventory amount in conjunction with the CAO module allows the store managers to process an automatic order for the distribution center which also includes health and beauty products. We base our orders on minimum quantities or a sales average, whichever is greater, taking into consideration quantity on hand. CAO has allowed us to reduce our inventory dollar investment at store level by ordering the right products for that store and at the same increase sales because we have the products that sell at that location. Store managers are gaining more and more confidence in the automated ordering process each week as they review their orders and see how well the system is calculating the order for their stores."*

Bullard says that another important benefit deals with out-of-date merchandise. Specifically, stock that usually gets piled up on the back room for weeks before getting written up for return does not accumulate anymore, leaving the stores' back rooms and coolers cleaner and more organized. In addition, Flash Foods has also been able to

automate the process of returning items to its distribution center by repositioning route people from the distribution center that used to visit stores to order the health and beauty aids products. Now, these route people work with the managers to check for out-of-date merchandise which is then scanned using a PDA which creates a file on OMWS. That file is used to correct the item-level inventory and also is transferred up to corporate level to create the credit memo at the distribution center. This process saves the store managers time as well as reducing clerical keying at the distribution center.



OMWS is Pinnacle's Windows®-based in-store manager workstation system. It is well-known in the industry for its adaptability to clients' needs by allowing complete flexibility for automating daily reports, timekeeping, labor scheduling, and inventory and fuel inventory control. OMWS adapts to the needs of growing companies and offers advanced interfaces with POS, ECR, and tank monitoring devices. OMWS offers an inventory module specifically designed to handle inventory counts from a handheld device used by auditing crews or store managers. The Symphony Handheld solution offers an inventory

module that takes item-level counts from the scanner and posts them to item-level inventory in OMWS. CAO then pulls the counts from OMWS to calculate the store's current quantity on-hand. It also grabs the sales history from Pinnacle's Journal Manager™.



CAO, used in conjunction with the OMWS inventory module, removes a lot of guesswork because it allows retailers to use the information currently in the manager workstation to determine needs when ordering inventory. It evaluates products sales over variable periods to account for variances depending on situations or seasons. With that background, retailers can set up minimum required stock-on-hand rules that the manager workstation will use automatically in conjunction with available stock data maintained in the system. The manager workstation then automatically recommends orders, which can be evaluated and confirmed by store personnel and immediately transferred to vendors. This automated process reduces the time store managers dedicate to the inventory management and ordering process. Once stores

are set up and using the CAO features, they will have less inventory but will be able to avoid out-of-stock issues.

Transitioning to automation for retailers is a comprehensive undertaking. And, despite its advantages, CAO technology has been slow to catch on. Today, it has evolved into a powerful system that lets store managers make more accurate, cost efficient orders and easily transmit them to the chain's own distribution warehouse.

Flash Foods completed their roll-out of CAO and the OMWS item level inventory solution to all of their 180 locations in late 2006. They are now 100% item level inventory and utilizing CAO for warehouse and non-DSD related items at all of their stores. Their goal for 2007 is to continue pushing CAO out to their DSD community.

This is big, big news! Very few retailers in the country have accomplished this. It speaks not only to the effort Flash Foods put into this project, but the capability of the Pinnacle solutions.

From Pinnacle's Palm POS and Journal Manager to Oasis MWS solutions, including item level inventory features, Symphony Handheld and CAO, Pinnacle offers a complete suite of tools to help retailers completely manage store inventories and see positive impacts to their inventory dollars.

## **Summary – What are the benefits of implementing CAO and item level inventory?**

### ***Benefit #1 - Assist in store's inventory management***

Controlling inventory in the backroom has always required managers to maintain a delicate balance between inventory levels and out-of-stock conditions. CAO can control that balance across the entire range of products regardless of demand levels and, to some degree, space allocation.

### ***Benefit #2 - Scan rate at the POS will improve***

In order to maintain accurate inventory item levels and ensure a successful CAO implementation, store personnel must be trained to scan all individual item SKUs at the POS. For example, when cashier are presented with a 12 oz. Diet Pepsi and a 12 oz. Diet Coke, they may be tempted to scan the Diet Pepsi twice instead of scanning each product separately. Doing this will cause sales data from the POS to CAO to be misrepresented and cause the replenishment order to be incorrect.

By training the store cashiers to correctly scan products at the POS to integrate with CAO, the scan rate at the POS will also be improved.

### ***Benefit #3 - Labor hours associated with ordering will decrease***

When reviewing its manual ordering process before implementing CAO, Flash Foods found that the average number of hours spent by a store manager in the manual order process,

including creating build-up sheets and other replenishment associated activities, was 12 hours per month. After implementing CAO with just the cigarette category, it has seen that average number drop to just four hours per month.

### ***Benefit #4 - Gross profit will increase***

When reviewing the results of implementing CAO and item level inventory with the cigarette category, Flash Foods found that the estimated dollars invested in unnecessary overstock of inventory was on average at each store \$82,000. The cigarette category was 44 percent of retail inventory, or \$36,080. When reviewing these numbers, Flash Foods found that the average cigarette inventory pulled from each store was \$9,000 which at 180 stores is equal to a \$1,620,000 investment.

### ***Benefit #5 - Inventory theft will decrease - can not steal what is not there***

When keeping an accurate balance of inventory at the store by knowing what products are selling, what items are necessary stock, and what is overstock, the backroom stock that tends to pile up and be unnoticeable is drastically reduced and much easier to manage.

### ***Benefit #6 - Leverage investment in technology***

Thousands of dollars are spent on equipping stores with POS systems and implementing scanning and training personnel. CAO simply uses the transaction sales data that is already being capturing.

## **Conclusion Statement (Pending)**