

How Intelligent Field Sales Automation Can Reduce Out-Of-Stock Conditions on the Retailer's Shelf



White Paper

Executive Summary:

Out-of-stock shelves cost retailers and distributors millions of dollars in lost revenue and damaged customer goodwill. By adding data-driven intelligence to the distributor's field sales system, distributors can eliminate six common causes of shelf holes.

Market Drivers:

Grocery distributors operate on razor thin margins, compete with each other for limited retail shelf space and may face penalties from retailers for excessive out-of-stock products. Retailers keep a daily watch for shelf holes, knowing that empty shelves anger their customers, and lead to lost sales, not only of the item that is out of stock, but often of other items on a customer's list should that customer decide to look for the product at a competing supermarket.

According to a study done by IDG Research, 59% of consumers rated out-of-stocks as "very frustrating," while 25% say that if they find a specific product is missing, they won't buy anything at all, or will wait to buy on their next visit.¹ Of course this can also result in a customer making the purchase at a completely different retailer. In order to minimize these effects, retailers carefully track out-of-stock occurrences, and use this data to penalize repeat offenders or reward distributors who keep their shelves stocked.

A study commissioned by the Grocery Manufacturer's Association (GMA), found that "Increasing product availability on the store shelf can boost retail sales by three percent or

¹ Harper, Kapoor, Potter & Thompson, 2007, *The Missing Metric: Measuring Shelf-Space Profitability*, Booz Allen Hamilton, page 2



\$200,000 annually per average supermarket...” The study done for GMA’s Direct Store Delivery committee, and conducted by Roland Berger Strategy Consultants, revealed that:

Consumers cannot find the product they want 7.4 percent of the time they shop. Forty percent of those shoppers confronted with an out-of-stock product situation either postpone their purchase or shop elsewhere, putting \$6 billion in annual retail sales at risk in the top 25 grocery categories. The study reflects audits of 1,600 items across seven DSD categories in four major retail chains, including Albertson’s, Inc., Publix Super Markets, Inc. and Winn-Dixie Stores, Inc. In addition, EMS provided data and analysis of the top 25 grocery categories in 500 stores. Other key findings of the study include:

- On average, the top 10 percent of the fastest moving items accounted for 45 percent of the out-of-stock products.
- When a DSD product is unavailable on the store shelf, the retailer can potentially lose \$75,000 annually per supermarket, resulting in a 2.9 percent annual loss per average supermarket.
- Out-of-stock rates nearly double during store promotions, jumping from 7.4 percent out-of-stock to 13.1 percent out-of-stock.²

Clearly, shelf holes represent an enormous problem for both retailers and suppliers alike. Solving the problem of out-of-stock merchandise requires cooperation between the retailer and the supplier. Part of that solution is providing data-driven sales automation to the distributor’s field sales force.

Shelf holes develop when the demand for a product outstrips the stock on hand. In today’s world of just-in-time stocking, most retailers keep nearly all of their stock on the shelves, with very little in the back room. Generally, if an item isn’t on the shelf, it’s probably not in the store. Merchandising is often done by the distributor’s field sales force, which is responsible for meeting the delivery of product at the retailer’s receiving dock, filling the shelves and creating new orders for future delivery.

² GMA Press Release, June 10, 2002, *GMA DSD Out-of-Stock Study Examines Causes, Solutions to Out-of-Stock Problem*, Grocery Manufacturer’s Association, page 1



The Problem:

Experienced sales managers of national food distributors have discovered that shelf holes have six basic causes:

1. The sales rep orders items that are not in stock at the warehouse.

In this scenario the rep orders an item which is either in short supply or is not in stock at the distribution center. When the fulfillment team picks the order, they mark that line as 'backordered' and continue picking. The delivery is shipped short, and a shelf-hole results.

2. The sales rep orders items that have been discontinued.

This is very much like the first situation, with this difference: The sales person has been notified of discontinued items. However, that notification was done via fax or email. In either case, the information is printed out and inserted in a notebook or attached to a clipboard—which was left in the office or the vehicle. Since the sales rep didn't have the data at the point of ordering, they order an item which cannot be fulfilled, and again, a shelf-hole is created.

3. The sales rep orders quantities inadequate to meet demand.

This time the sales rep has ordered a product that is in stock at the DC, however, without historical trend data, the driver simply underestimates the demand for the product in the coming sales cycle. The warehouse fulfills the order exactly, but a shelf-hole still results.



4. The sales rep orders unapproved items.

Most large chains have approved product lists (APL's) that suppliers must comply with. In this situation, a sales rep orders an item that was once on the approved list, but has recently been removed. The rep received notice of the change, but it is on the clipboard under the discontinued items notice. The order gets to the DC, and *if* the DC has a procedure for filtering orders against APL's (unlikely) the item is not shipped, and a shelf-hole results. If they have no filtering procedure the item *is* shipped, resulting in a fine for APL violation. The product is then pulled from the shelf, resulting in a shelf hole. Further, the product must now be returned to the distributor, adding the cost of return transportation and restocking to the problem.

5. The sales rep fails to order newly approved items.

After the company has laboriously negotiated the addition of a product to the APL, it can be weeks or months before the product actually makes it on to the shelf. Since there is no obvious empty shelf space, these missing products go unnoticed by the retailer's staff. They are in effect invisible shelf holes: the shelves are full, but the product is still unavailable when a customer comes looking for it. Why didn't the sales rep order the new product? The new product notification is on a clipboard in the office with the other notices.

6. The sales rep is unaware of upcoming in-store promotions.

This, the most frustrating and most common cause of shelf holes is caused by a lack of communication between the retailer and the distributor. It happens when the retailer decides to run a promotion on a particular product without notifying the distributor. The sales rep, unaware that the product will be on sale next week, creates an order that would normally ensure adequate supply for expected demand. The promotion runs and halfway through the second day, customers find only empty shelves and rain checks.



Recommended Solution:

Intelligent Field Sales System

Each of the above scenarios can be addressed by making sure the sales rep has the right data at the right time and place. However, only a data-driven intelligent solution can accomplish this. "Any sales automation system can create blind orders and accurately transmit that data to the fulfillment center," says Jay Larsen, Director of Mobile Software for Versatile Systems. "Even the oldest DOS technology could do that. If accurately transmitting data were the entire solution shelf-holes would never develop." Larsen believes that simply automating the ordering process is not enough. What is needed is the ability to make the process more intelligent.

According to Larsen, an intelligent ordering system must provide the end user with focused, timely, relevant data and prompt the user to make wise decisions. "Almost all DOS legacy systems – and many modern derivatives – are unable to provide such timely data and intelligence," Larsen says. He further asserts that an intelligent system must go beyond the basics of customer lists, pricing and product catalogs; it must provide more than just the ability to create and transmit orders. To address each of the six causes of order created shelf holes, a data-driven intelligent order creation system must also:

1. Allow the end user to view inventory levels at the DC.

Giving the sales rep a view into product availability allows them to avoid ordering product that is likely to be shipped short or backordered, and affords them the opportunity to order a substitute product.

2. Provide warnings on discontinued items.

By warning the user that an item has been discontinued, the rep has the opportunity to order an available product in its place. The system should also allow the driver order a discontinued product as long as the warehouse has a sufficient supply of the product on hand.



3. Provide historical trend data by customer and product.

Providing trend data at the point of ordering allows the sales rep to make more informed decisions based upon past performance. This data should be configurable to fit the distributor's business rules.

4. Enforce APL's at the time of order creation.

The best practice for filtering non-APL items takes place at order creation. An intelligent ordering system can stop violations before they are created by simply not allowing unapproved items on the order. This eliminates the need for extra processing at the fulfillment center.

5. Provide new product notification.

Displaying a list of newly approved items at the start of the ordering process gives the user the option to place those items on the order. This significantly reduces the time between approval and first placement on the shelf.

6. Provide timely notification of upcoming promotions.

Notification of promotions requires coordination between the retailer and the distributor. Retailers must be willing to communicate upcoming promotions to distributors. The ordering system then provides the data to the sales rep at the point of order creation. This allows the sales rep to stock up for the promotion.

The retailer and the distributor must be committed to solving the problem of shelf-holes together by providing each other with timely data. This is especially true of in the case of ensuring adequate stock-on-hand for promotions.

This level of automation intelligence assumes a comprehensive set of solutions that includes a warehouse management system, a mobile sales automation system, and EDI communications with the retailer's datacenter. Obviously, these solutions are not easy to design or develop; therefore, choosing the right solution providers is critical to the success of any new technology initiative. This paper specifically addresses the mobile sales automation portion of the solution, i.e. the tool the sales rep uses in the field.



Choosing a Partner:

In choosing a partner to supply the field automation piece of the solution, it is important to consider the following criteria:

1. **Products instead of projects**

In most cases you should choose a vendor who has developed a robust product that can be customized for your needs. You'll benefit from all of the customization that they have done for other customers. Generally, choosing a custom installation of the vendor's standard product is much less expensive than developing a one-off custom project with the same functionality.

2. **Experience with mobile workforce solutions**

There is no substitute for experience. Beware of vendors who show up with PowerPoint presentations talking about what they could do if given the chance. Ask how long their company has been programming for handheld computers in general and field sales automation in particular.

3. **Experience of the vendor's development team**

Beware of companies who simply hire temporary programmers when they need them for a project. While hiring temps or outsourcing to a contractor can be beneficial for the vendor, it can cause real headaches for you. Developing software for handheld devices is not the same as programming for PC applications. This is especially true when faced with issues such as barcode scanning, searching voluminous product catalogs or ensuring data communications are reliable. Choose a vendor with on-staff developers. These people generally have years of experience handling the specialized problems of developing for handheld computers.



4. Experience with multiple hardware manufacturers

Choose a software provider who has relationships with a range of hardware manufacturers. This makes it more likely that the vendor will be able to supply the right hardware for your situation. Vendors tied down to one manufacturer cannot give you the options you need.

5. Device Independence

Make sure the vendor's software will run on a variety of Windows Mobile devices. Choosing a software package that will only run on one device makes you a hostage to that hardware manufacturer. It also limits your choices should your manufacturer discontinue your device. If your software will run on other devices made by the same manufacturer, at least you may be able to upgrade to a new device without much trouble.

6. Commitment to the workforce automation verticals

It is very important that the vendor you choose intends to stay in the mobile workforce automation business. The marketplace has seen a lot of consolidation of solution providers recently. Some major players have simply decided not to continue supporting this segment of the market. Look for a vendor who has invested heavily in the development of a robust set of solutions. Not only will they most likely have the tools you need, they will most likely be there for you down the road.



In Summary:

Out-of-stock merchandise costs retailers and wholesalers millions of dollars per year. By introducing data-driven intelligence to the order origination process, distributors can eliminate six of the most common causes of shelf-holes, improving customer service, increasing sales and decreasing costs.

Required is an automated sales system featuring intelligent ordering creation which:

- Displays warehouse stock availability
- Warns the user about product status and allows alternate products to be ordered
- Provides historical sales trend data
- Enforces APL requirements
- Displays new product availability
- Displays products soon-to-be on promotion

Implementing such a system requires the help of experienced solution providers with established customizable products that are device and manufacturer independent.

About Versatile Mobile Systems:

A wholly owned subsidiary of Versatile Systems, Inc. Versatile Mobile Systems (VMS) provides leading edge mobile workforce solutions to the food, beverage and consumer packaged goods marketplace. Transforming itself from its earlier incarnation as a hardware reseller and custom software project shop, VMS spent four years and over \$5 million in R&D to develop the *Mobiquity Solution Suite™* with a

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vision to become the premier provider of mobile route accounting solutions. Since its release in July of 2006, the *Mobiquity Solution Suite™* has been helping thousands of mobile workers do their jobs more intelligently.

The Mobiquity Solution Suite™ encompasses four configurations that operate on a unified data model. This allows our customers to assign different sets of functionality to different users according to their roles:

Mobiquity Sell™	Pre-sales, intelligent order origination and merchandising functions
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Mobiquity DEX™	Delivery functions with DEX capabilities
Mobiquity Route™	All of the above with enhanced truck inventory functions

For more information about Versatile's mobile workforce solutions, or to schedule a web-demo, please visit www.versatile.com, or call toll free: 800-262-1633.

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