OUT-OF-STOCKS:

Whose Fault? Whose Fix? How?

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IT IS THE CULMINATION OF MONTHS OR YEARS OF EFFORT. It is the moment that a consumer walks down the aisle of a retail store to purchase a product. But when, after so many studies and so much industry hand-wringing, that product isn't there — *why*? What is being done, and what can be done, given our growing visibility into the problem and fast-changing technology, in the fight against out-of-stocks? To go beyond the numbers, we spoke with executives for retailers, CPG suppliers, sales agencies and technology providers to get their latest perspectives on out-of-stocks, and the trading partner attitudes and technologies — *mature, emerging* and *horizon* — they recommend be brought to bear on the problem. HERE'S WHAT THEY TOLD US ...

■ AT GMA'S APRIL IS/LD CONFERENCE, a vice president for a major retailer made what was, from an industry podium, a bold and surprising statement: Quite frankly, he said, retailers "own 90 percent" of the industry's multi-billion-dollar out-of-stock problem.

Further, he said, while many technologies are now available to help address the out-of-stocks problem, none of them can really solve the problem because, at its root, "It's a store execution issue."

ARE OTHER RETAILERS WILLING TO CLAIM OWNERSHIP of out-of-stocks? If so, what can they do about the problem? What are they *willing* to do to begin to make real headway? What help can suppliers and today's technology give them? To find out, we conducted an informal survey of several key industry players.

"No question that this is primarily a retailer issue," says Bill Homa, Chief Information Officer of Hannaford Brothers. This stance was echoed by a cross-section of industry executives representing all sides of the CPG industry — retailers, manufacturers, sales agencies and technology providers.

While most respondents squarely placed responsibility of ownership with retailers, they were also quick to point out that there are definite opportunities for manufacturers to help in facilitating improvement: namely, collaborate with retailers.

Interestingly, the collaboration most often mentioned as necessary and helpful was technological collaboration — which does seem to contradict, at least to a point, the IS/LD speaker's statement that technology is not a solution.

"Manufacturers must step up and come to the aid of the retailers, and bring their technology, so both sides can work together to find a solution to this problem," observes Dee Biggs, Director of Demand Fulfillment Services for Welch Foods, Inc.

BUT NOT, APPARENTLY, RFID — AT LEAST NOT YET:

"It's not a problem that RFID at any level (item, case, pallet) can address," Hannaford's Bill Homa asserts. Moreover, none of the other respondents so much as mentioned RFID or its potential application to the out-of-stocks problem.

WHAT *DO* THEY RECOMMEND?

Three areas — **retail ownership, collaboration** and **pragmatic technology investments** — were recurring themes among the executives surveyed.

Retail Ownership

Cathy Green, Chief Operating Officer for Food Lion, observes: "The retailer has direct responsibility to their consumer. We own it. We miss the sale if we're not in stock; the consumer leaves knowing only that *'Food Lion didn't have what I wanted.'* I don't believe the consumer would associate an out-of-stock with a failure on the vendor's part."

Dee Biggs of Welch's agrees: "In terms of who is responsible, it is primarily a retail issue in my mind, as the issues here are largely the responsibility of the retailer."

Then, of course, the relevant question becomes: *What is or can be done at shelf point?* "Despite the technology," Biggs says, "the biggest thing missing in fixing the problem is having people in the stores with the responsibility of following up on out-of-stocks immediately."

BUT HOW?

Suggests Dee Biggs: "The industry needs some type of third-party company that identifies out-of-stocks with the aid of the retailer, and then finds solutions to get the item back in stock, whether (by) finding the product in the back room or making sure the item is ordered from the warehouse.

"Currently, the stores don't have enough people to do this effectively, and other organizations with people in the store are ineffective in managing out-of-stocks. There needs to be a new entity that focuses on helping to resolve these issues at the store."

At present, a major barrier in many retail organizations is "conflicting motivations at store level between labor resources and profit," observes Lance Andersen, Vice President-Retail Operations – Dedicated Teams for CROSSMARK, the sales agency. Historically, many store managers have focused, first and foremost, on minimizing labor costs because of the metrics by which they are evaluated.

Unless the metrics are changed to better balance the need for higher in-stock rates with store labor control, in these organizations out-of-stocks will continue to drain volume and erode consumer satisfaction.

NOT EVERYONE AGREES THAT RESPONSIBILITY RESTS LARGELY OR SOLELY WITH THE RETAILER. "In reality, when a problem affects the end consumer's ability to buy a product, everyone in the supply chain shares responsibility to fix the problem," says Jeff Schouten, Group Director of Category Management and eCommerce for Miller Brewing Company.

Indeed, agrees CROSSMARK's Lance Andersen: "While the retailer is in control of many of these factors (that impact out-of-stocks), the reality is that both retailer and supplier own the problem because both are affected by the lost sales."

Collaboration

WITH SO MUCH ON THE LINE FOR BOTH PARTIES, more and better collaboration is essential for industry improvement, respondents agree.

"Retailers, suppliers and distributors must work together to identify the issues leading to the out of stocks, and put plans in place to address them, and then measure the results," Miller's Schouten says. "Often, (success) comes down to communication and coordination within and between the retailer's and supplier's organizations."

IT ALSO COMES DOWN TO RESOURCES, observes Gary Chartrand, Chairman and CEO of sales agency Acosta Sales and Marketing Company: "Retailers alone do not generally have the manpower and technology to analyze and solve each promotion opportunity. Suppliers also have a responsibility to ensure they are bringing sound recommendations to the retailers in terms of order quantities.

"Unless retailers and suppliers collaboratively share data and work together, consumers will

■ **Three approaches to reducing out-of-stocks — RETAIL OWNERSHIP, COLLABORATION and PRAGMATIC TECHNOLOGY INVESTMENTS — were recurring themes among the executives surveyed.**

continue to face promotional product shortages."

Such collaboration must go beyond a mutual dedication to technological innovation. Retailers and manufacturers, "must enter into collaborative relationships where we 'think beyond the bag' to eliminate the barriers," Food Lion's Cathy Green states. To this end, she notes, Food Lion focuses on communicating across the supply chain to develop a consensus that, "everyone has to execute flawlessly within a culture that embraces the consumers' needs."

ONE EXAMPLE OF ONGOING PROGRESS IN THE INDUSTRY is cited by CROSSMARK's Lance Andersen: "Target stores have collaborated with suppliers on a program that allows accurate tracking of promotional sales that in turn helps match demand by store.

"The supplier is required to produce promotional items using a different UPC code (*e.g.*, bonus packs). Target runs a given promotion for an extended period of time and dictates specific display space.

"This process allows a product to be displayed and the supplier to replenish merchandise to meet demand without disrupting the integrity of the everyday 'on shelf' item.

"Both retailer and supplier are able to enter and exit the promotion period with proper inventory and allow uninterrupted consumer availability of both the promotional and everyday item."

"COLLABORATION" OFTEN COMES DOWN TO COMMUNICATION AND COORDINATION within and between the retailer's and supplier's organizations, Dee Biggs points out: "Has the promotion been communicated to the stores and to the supplier's merchandisers? Is the display mapped on a promotion floor planner, store by store? Are display timing and build responsibilities clearly spelled out? Who is responsible to follow up and replenish the display and shelf inventory during the promotion?

"Agreeing on these responsibilities and having a discussion about the potential lost revenue upfront is key to collaborating effectively on this problem."

Ultimately, as Biggs points out, success depends on this collaboration: "It is clear that the manufacturers and retailers will have to work together to find a solution. The information is available; it is now time to create the processes and infrastructure necessary to deal with the problem."

To accomplish this, it seems, the willingness to collaborate around technology that will assist day-to-day retail execution must be generated by proactive pushing from manufacturers, rather than a reaction based on retailer demands.

Pragmatic Technologies

INVESTMENT INTO SUPPORTING TECHNOLOGIES can be broken down into three general categories: **mature, emerging** and **horizon.**

As a rule, industry respondents agree, a company should prioritize its investments to appropriately "cover the basics" before moving on to more complex capabilities.

As relates to out-of-socks, supporting technologies and their development stage can be categorized as follows.

■ *Mature:* Inventory Control

A "basic" technology area highlighted by several respondents is **inventory controls.** This, they assert, is one of the biggest "first steps" that needs to be implemented to drive long-term success.

"The key issue is the retailers do not have accurate perpetual inventory systems, so store ordering can be difficult and lead to ordering the wrong items," Welch's Dee Biggs observes.

"There are some retailers that have moved to systems that order for the stores, but this has not always been successful either, as the stores feel they are being left out of the loop… The retailers, in addition to needing a better, more accurate perpetual inventory system, also need a better way to

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manage the back room of the stores, which are notorious for being a black hole.

"Too many items are lost in the back room and go overage or get damaged. Many times an item is out of stock on the shelf, yet the product is in the backroom, but nobody knows that or they can't find it.

"Some retailers are addressing this issue by creating warehouse type systems to keep track of inventory in the back room. Target does a great job in this area, and I am sure it has a very positive impact on their out-of-stocks."

■ *Emerging:* Forecasting, Merchandise Optimization

ONE OF THE BIGGEST TECHNOLOGY LEAPS IN RECENT YEARS for the retail industry has been around **forecasting and pricing / promotion optimization tools.**

Acosta's Gary Chartrand outlines how an improved forecast will help the retailer reduce the number of stock-outs:

"Allocation-driven out-of-stocks represents the largest single cause, and, therefore, opportunity. The solution requires an ability to synthesize several data sources to more accurately forecast product movement. It becomes imperative to understand consumer behavior at the individual store level across product category and promotional activity.

"To execute this type of store level analysis for every promotion requires smart people, great processes, and enabling technology to support them."

Hannaford, says Bill Homa, believes it is among a few retailers that have made the appropriate first steps and begun the journey to a better forecast via emerging tools. "We have combined a perpetual inventory system with a world-class forecasting tool to drive better orders," he says.

"And our results demonstrate a dramatic improvement in out-of-stocks and a corresponding improvement in sales (as you would expect)… Unfortunately, most retailers don't have robust store ordering systems and processes capable of taking ordering to the next level."

Software companies such as DemandTec and Khimetrics (recently purchased by SAP) offer packaged solutions that help retailers create optimized prices and promotions at the item-location level. The system can then utilize this information to forecast demand, both base and promoted, based on an economic analysis of a variety of factors including store-level historical POS / market basket information, syndicated data and promotion flags.

This helps retailers provide their stores more accurate forecasts with which to drive store orders.

DEVELOPING SUCH SOPHISTICATED SYSTEMS HAS BEEN NO EASY TASK, and the challenge is ongoing.

Suzanne Valentine, Vice President - Merchandising Analytics for DemandTec, describes the complexity that goes into building accurate forecasts:

"The models underlying the DemandTec engine work at the store-SKU level and comprehensively capture cross-elasticities between both highly substitutable and synergistic products, as well as the lift associated with a wide array of merchandising strategies (*e.g.*, feature, display, TPR, base pricing, multiples pricing, loyalty cards)."

IT IS THIS LEVEL OF SCIENTIFIC ANALYSIS THAT IS REQUIRED to make significant strides in store-level ordering, and, ultimately, to have an impact on out-of-stocks.

IMPROVED FORECASTING, OF COURSE, IS NOT A RETAILER-ONLY GOAL. CPG companies, too, are finding a wealth of new demand planning solutions on the market, each purporting to help them better understand the impact of their promotional activities on their base demand.

At Pharmavite, LLC, Amy Rooks, Director of Demand Planning, is leading an implementation of technologies and processes that the company hopes will create a collaborative forecast inclusive of all relevant factors (such as base demand, promoted demand, seasonal impacts, cyclical impacts, etc.)

Her goal: a single forecast that the entire company can utilize in planning and planning discussions, both internally and with Pharmavite's retailer customers.

CREATING AN IMPROVED FORECAST WILL HELP determine how much product will go out the door — but it won't help determine if a retailer is **carrying the right products for its customer set.**

To address this reality, significant technological development in recent years has been focused on the assortment and space planning area.

Gary Chartrand describes this challenge as "the shelf space issue. Think of this as the three *R*'s. Is the *R*ight SKU, in the *R*ight store, with the *R*ight allocation?" The ultimate goal, he says, is to understand "'*Who* is shopping in the store?', '*How* are they shopping that particular store?', and '*What* items are they buying?' Each store, category, and brand needs to be treated uniquely, based on either cluster or store specific information."

Software companies including Galleria and JDA are focusing on the concept of merchandise mix optimization within the retail industry. These applications allow retailers to create template planograms based on cluster / store profiles for each category. This tool allows the retailer to focus on the value-added process of identifying the correct mix of products that will help a category reach its goals while maximizing in-stocks.

Another major benefit of merchandise optimization tools is the ability to determine if a product mix is *too* assorted. In the quest to be everything to all consumers, many retailers try to carry too many SKUs — ergo, the shelf space crunch.

With the right set of tools, manufacturers and retailers alike can look at the mix of products in a retail set, and investigate the option of reducing a mix with the goal of driving higher margins. As these tools become more advanced and integrated with forecasting tools, users will be able to perform easy "*what-if*" analyses for strategic optimization.

■ *Horizon:* **RFID**

PERHAPS TODAY'S MOST DISCUSSED AND DEBATED TECHNOLOGY IS RFID. *Can it help reduce out-of-stocks? Can it be done cost effectively?* Many people believe the answer to both of these questions is "no". However, enough empirical data does exist to make continuing this conversation interesting.

One recent report, *"Does RFID Reduce Out of Stocks? A Preliminary Analysis"* by University of Arkansas researchers Bill C. Hardgrave, Matthew Waller and Robert Miller, and published in November 2005, reported that "RFID reduced out of stocks by 16 percent" for a set of pilot Wal-Mart stores across a large set of categories. More recently, Hardgrave updated these initial estimates at the recent *RFID Journal LIVE!* 2006 Conference to a 30-percent reduction in out-of-stocks "for products selling between 0.1 and 15 units daily." (*May 4, 2006,* **www.rfidupdate.com/articles/index.php?id=1110**.)

Whether RFID ever makes sense for smaller retailers, only time will determine. For now, participants in our discussion find no compelling reason to include RFID in their cache of technological tools for reducing out-of-stocks.

Conclusion

Out-of-stocks remain a frustrating, multi-billion-dollar industry problem — yet very few manufacturers or retailers are collaborating effectively, taking advantage of the out-of-stocks-related tools available to them.

Retailers and manufacturers alike will need to embark and collaborate on multiple initiatives across store execution, forecasting, merchandising and inventory management to begin making headway on the out-of-stock problem.

RFID may not be relevant to most players today, but initial reported success of some pilot programs indicates that it is certainly worth following, and eventually leveraging, depending on the business context.

One thing of which the industry can be sure? In the words of Welch's Dee Biggs: "The (long-term) solution will likely entail several different initiatives, but will use the available technology." ■