Is There a Smarter Way to Handle Excess Active and Obsolete Inventory?

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Excess at-risk inventory ultimately impacts a company's bottom line. But because companies are more focused on the development and promotion of new products, the problem of excess inventory is seldom a priority. Companies often resort to high-overhead marketing promotions, rebates, or complete inventory write-offs to unload their excess inventory.

Let the (Excess) Inventory Flow!

Rather than falling back on these detrimental practices under duress, many have wondered whether there might be better, more deliberate ways of dealing with the conundrum of excess inventory instead of customarily writing it off against financial reserves, which directly impacts the bottom line. The advent of the Internet and the well-embraced auction paradigm to drive competitive bidding (which has in some cases proven to increase recoveries by 20 percent or more) has prompted the growth of a new crop of business service providers who have sprung up in order to meet a need in the market.

It is certainly no news today that the Internet has been a disruptive technology that has irreversibly changed many of our habits. One change for sure comes from the convenience of leisurely Web browsing and online shopping from our cozy places, albeit sometimes unfortunately bundled with the inconvenience of late or incorrect delivery and lack of order visibility and status tracking, followed by annoying and costly returns (and then unnecessary trips to the postal office, just to negate any promised convenience in the first place). Other Internet-based phenomena include *business-to-business* (B2B) auctions and reverse auctions. Namely, given the success of **eBay** in the consumer arena, one might wonder whether some eBay-like practices can help B2B sales too, since Web-based auction portals should allow users to seize the power of the Internet for speed and anytime, anywhere access. To refresh our memories, according to **Wikipedia**, *reverse auction* (also called *procurement auction*, *e-auction*, *sourcing event*, *e-sourcing*, or *eRA*) is a B2B tool used in industrial procurement. It is a type of auction in which the roles of the buyer and seller are reversed with the primary objective of driving purchase prices downward. While in an ordinary auction buyers compete for the right to obtain a good, in a reverse auction, sellers compete for the right to obtain money (by providing a good or service).

There should be alternative channels for a company's excess inventory, and a way of transforming them into sales opportunities, without encountering the difficulties described in *Let the (Excess) Inventory Flow!* The trick is in finding those opportunities without distracting the sales force. The first logical step would be to engage the existing channel by establishing a private auction platform to post the inventory. Members of the sales team—or selected channel partners and retailers—could then bid competitively on the inventory. Minimum price thresholds would be set and bidding activity would take prices upward from there. These opportunities would afford sales representatives and retailers alike the opportunity to generate upside sales revenue by buying in inventory at a discounted price (with the price still being above contractual price protection thresholds). In addition, they would allow for creative sell-through programs (for example, truckload sales at a regional big-box retailer—without the cost and overhead of marketing promotions).

Similar principles would apply to excessive spares inventory or global spares inventory balancing. Traditionally, due to the age and condition of the product, the usual destination for excess spares inventory is to the scrap bin. However, with recycling legislation—and costs—on the increase, scrapping excess inventory is not as smart or as easy as it once was. Imagine the convenience of having a 24x7 intranet marketplace within a global service organization, where each location can advertise excess spares inventory or flag shortages to all other locations. The intranet provider can immediately send an e-mail to the other registered member locations, alerting them to the excess components. Or, if the host company wishes, an e-mail can be sent only to those registered members requiring the product. If another location needs the inventory, it can enter a bid for the excess inventory, whereby the user company will receive an e-mail that a bid has been entered and, after accepting it, the inventory will be on its way to the buyer. In the case that

such a simple solution to global spares inventory balancing within the organization does not work, again, a flexible bidding technology should allow the user company to take its excess spares inventory to the open market to solicit as many brokers or buyers as needed to ensure competitive bidding, while ensuring that freight costs do not further erode recovery margins.

This brings us to the second step of active *product inventory disposition* (PID), which can run sequentially or in parallel to the first. Companies would again use the private auction platform to market their inventory to alternative channels, which may consist of some or all of the following: non-contracted retailers interested in making an opportunistic buy, buyers in emerging markets, or the tens of thousands of e-tailers doing business on eBay, **Amazon**, or **Yahoo**. Owing to their industry expertise and connections these business service providers can help user companies find the right market for their products and bring those candidates to private auctions, where competitive bidding drives the maximum market price on the inventory.

Finally, any residual inventory remaining in stock following the first two alternate channel programs can be automatically rolled over to the liquidation site. Bidders on the private liquidation site may be brokers and liquidators the company currently uses, or companies brought on to provide recommendations of wholesalers specializing in the product categories. In the course of seventy-two hours, the inventory is listed and sold to the highest bidder (although the host company may decline all bids if not satisfied with the pricing). Service providers can handle all credit, collection, settlement, and logistics, and the inventory can be out of the host company's warehouse almost immediately. More details of how these service providers can help companies improve recovery on excess components include

- ensuring competitive bidding across the entire pre-approved broker audience
- providing market intelligence on fair market value of the excess inventory (the user company receives a monthly performance review with regards to bid history, margin analysis, and open market intelligence to ensure that the user company is getting the best market price available)
- allowing the user company to go to market anonymously (with the service provider acting as a proxy bidder), if desired, or branded
- bidding by lot or by line item, with package conditions being clearly visible to bidders as "new," "package defect," etc.
- providing accuracy with part number cross-reference (internal to industry) and extensive attribute defaults
- enabling bid visibility and bid approval to designated personnel, password-protected
- ensuring complete transparency with full bid history and audit trail (maintaining an audit trail of bidding activity and award history can be required for the US *Sarbanes-Oxley Act* [SOX] compliance).

Further, a business service provider (whereby a user company is entitled to hosted, secure, stand-alone solutions with no in-house information technology [IT] staff involvement required), may undertake the management of the administrative and operational aspects of liquidating excess inventory via

- a single *accounts receivable* (AR) and customer master data set-up, whereby the service provider handles all further account management with the broker community, regardless of their numbers
- managing freight and logistics, thereby ensuring delivery to the user company's terms (the user company no longer has to add the cost of freight to already thin excess inventory recoveries)
- managing collections from all sales and paying the user company in a single monthly payment

Whether a user company is an *original equipment manufacturer* (OEM) or a contract manufacturer, excess component inventory severely impacts its bottom line. Still, liquidating these excess components is seldom on a buyer's priority list, at least not until the accrued dollar amount comes to management's attention. Only then comes a flurry of frenzied activity to pull together the excess inventory list, whereby the inventory customarily goes to the broker who can clear the books the fastest. As an alternative solution, business service providers aim at helping companies work smarter. Specifically, enterprises should be able to improve the overall product life cycle profitability or recovered value (reportedly by 5 to 10 percent) by moving to a systematic process of continuously identifying and disposing of excess inventory as early in the product life cycle as possible. Also, proactive and routine disposition of excess inventory

should take place wherever it may be—components or finished goods, in the factory, distribution centers, or in the channel (dealers, retailers, distributors, OEMs), with the likely results of bringing top dollar and eliminating redundant inventory moves which add cost and damage product.

The key here, for any company, is to establish processes to routinely identify excess inventory as well as a go-to-market strategy (including pricing intelligence and best-fit buying community)—all with a low-overhead execution. One way to achieve these goals is via private, online, competitive auction portals directed to the specific buying channel that should

1. eliminate the administrative and operational costs of shortage procurement and excess liquidation;
2. strictly adhere to competitive bidding for component shortages and excess liquidation; and
3. ensure complete transparency and a full audit trail of all transactions.

What about Shortages? (They Can Happen Too)

With component shortages, however, time (a proven inventory managers' foe) leads to scarcity, exposure to appalling production line downtime situations, and increased cost. When demands unexpectedly change, or delivery, quality, or availability problems arise, buyers must rush to the open (broker) market to source components wherever they can. Sure, one can logically turn first to a 24x7 intranet marketplace within the global service organization, whereby each location can advertise excess spares inventory or flag shortages to all other locations. If there were such a portal platform, it could automatically e-mail other registered member locations to notify them of the shortage. Should an alerted location have the needed inventory, it can enter a "bid" for the shortage, triggering an automatic e-mail to the buyer that a "bid" has been made. The buyer then accepts the bid, and the inventory is sent out to the buyer.

But, unless there is some spares inventory in another service organization within the company (often without a viable way for anyone to know about it), the company's buyer must go to the open market to source it in a firefighting fashion. Yet, seldom are companies more exposed to price gouging than when they have exhausted all internal inventory sources and must resort to the open market to source their needed spares—fast and desperately. Manufacturers that deal with clever and well-versed brokers one-on-one typically are outwitted whether they want to sell or buy something. The problem of not following a specific procedure (other than buyers following their own instincts and preferences) is often compounded by a broker diversity based on the personal relationships of new buyers joining the buying team. Further, there is often no transparency in quotations (owing to phone and e-mail correspondence mostly). An added confusion is with the mapping of the internal part number versus external vendor part number, along with alternative component cross-numbers that have been approved by the engineering department on the approved supplier list.

There is always the option of having some *hedge inventory*, a form of inventory buildup to buffer against some unpredictable event that may not happen at all. Hedge inventory planning involves speculation related to potential labor strikes, price increases, unsettled governments, and other events that could severely impair a company's strategic initiatives. However, risk and consequences are unusually high, and top management approval is thus often required. Again, a more elegant solution could be a buyer portal acting as a private reverse auction or bidding platform that allows the company to go to the open market and solicit as many sources as needed to ensure competitive bidding, yet go anonymously under the banner of the portal provider.

That is to say that, as a surrogate bidder, service providers would buy the products in its name on behalf of the user company, and drop-ship the products to the client (see *Drop-Shipping—Internet Retailers' "Little Helper"?*) so that the user company's identity alone does not signal an opportunity for runaway prices. The service provider could even conduct some quality control, value-added services (packaging, testing, etc.) should user companies need them. Ideally, the buying and selling portal should be fully interfaced with the engineering department so that the buyer simply keys in the required internal component number and the portal would then populate the appropriate external vendor part numbers that are required. Also, a full audit trail should be provided for each purchase, whereby a multi-digit bid number is assigned to every bid that a broker logs into the system. In this case, *a purchase order* (PO) would not be issued until a bid number is submitted into the system by the buyer. Occasionally, there would be a need for an optional secondary bid approval should approval from the engineering department be needed.

Returns and Refurbished Materials Adding Oil to the Fire

Thus far, one conclusion would unequivocally be that inventory challenges exist at every stage of the product life cycle, since product phase-in/phase-out, missed sales, and basic forecast errors result in excess active inventory. The *end-of-life* (EOL) stock and obsolete inventory are the inevitable results of unsold active inventory that has since been displaced by newer-generation products, or otherwise discontinued. But what about *inventory returns*, the items that are returned to the manufacturer as defective, obsolete, over aged, etc.? An inventory item record transaction records the return or receipt into physical stores of materials from which the item may be scrapped. To make things even more painful, returns inventory comes in all shapes and sizes, with "new/unopened," "new/package-defect," "quality defect," and "consumer returns/used" being typical classifications.

Hidden in the darkest nooks and crannies of the warehouse, returned inventory accumulates until the aisles are virtually impassable. And many companies otherwise rigorous in their accounting standards do not manage warranty reserves effectively. Thus, when a liquidation action is taken, it is a hasty, ad hoc process, and millions of dollars in inventory asset recovery are swept out the door with the residue of the last damaged carton. It is but a small comfort that at least the things are out of the way and are no longer incurring the *storage costs*—a subset of inventory carrying costs. Storage costs include the cost of warehouse utilities, material handling personnel, equipment maintenance, building maintenance, and security personnel.

The phenomenon has even introduced the notion of *reverse logistics*, a complete supply chain dedicated to the reverse flow of products and materials for the purpose of returns, repair, remanufacture, or recycling. Many retailers have the proverbial problem of how to move inactive, "grey market" stock (irrespective of condition) that they cannot return to the manufacturer for full credit. Return rates in some industry sectors can be as high as 20 percent, although through targeted initiatives and channel cooperation, some nimble companies have managed to attain only a few percentile rates. Whether the return rate is high or low, across the board one fact remains constant—no one in the reverse supply chain wants to add a penny more to the cost of managing returns. Aside from treating a return as an additional opportunity to make a favorable customer impact, the entire process is viewed as a "necessary evil," a cost of doing business with customers ranging from OEM relationships to end consumers.

Again, like in the case of active excess inventory, well-orchestrated auctions can be tools to remarket inventory to a specific or a global audience with minimal resources or input required from the retailer or manufacturer. However, new best practices in returns inventory asset management involve outsourcing as much of the material handling and disposition process as possible. Service providers tout a number of returns material remarketing programs with global manufacturers in the high-tech and telecommunications industries. In turn, these manufacturers can reap both operational and financial benefits from off-loading this category of inventory as soon as the customer interaction is complete. In the case of such certified pre-owned programs for inventory that was often previously scrapped or liquidated at cents on the dollar, some financial impact should come from improved cash flow (less cash locked in idle inventory assets), better inventory turns (fewer weeks of inventory being on hand), better recovery, and reduced warehouse space. The typical process steps are depicted below:

1. *Returns Processing*—In this step, customer and channel returns are processed to the company's returns center as usual, with customer *return material authorization* (RMA), credit, replacement, and all customer-related activities being conducted by the manufacturer or designated *third party logistics* (3PL) provider.
2. *Material Sorting*—Once the inventory is in house, the primary objective is disposition velocity and elimination of unneeded touches. During the put-away process, inventory is segregated as "new/unopened" and all other classifications. Some companies at this point also sort out components or modules that are to be returned to the manufacturer directly. All other inventory is compiled on a liquidation sale list for the service provider.
3. *Material Valuation*—Once the service provider receives the listing, a market analysis is conducted to determine a rough estimate of the remarketing opportunity for the particular lot of product. The service provider then initiates a PO in an amount of 10 percent (or other pre-negotiated ratio) of the estimated value and the inventory is sold and shipped to the service provider. The inventory is off the user company's books and out of the warehouse in a matter of days from the time it was returned.

4. *Remarketing and Revenue Share*—Upon receipt of the inventory at regional locations globally,, the service provider proceeds with detailed inspection and sorting of the inventory. Some value-added processes may be performed, ranging from testing to repackaging to repair depending on the manufacturer agreement. Service providers are able to help with repackaging, re-labeling, and testing when it is appropriate to add value to increase recovery. All saleable inventory is remarketed through the provider's auction platform, and at the conclusion of each auction cycle, the sales revenue is split along the pre-agreed revenue sharing agreement, such as a 60-40 percentage (manufacturer-service provider). The revenue split is determined based on factors such as scrap ratios, value-add processing required, etc.

In a nutshell, the above would be an attractive revenue-sharing model (with a predictable revenue stream that allows a significant reduction in returns and scrap financial reserves for the manufacturer), whereby returned products are inspected, refurbished, and certified by the manufacturer. After these processes are completed, inventory ownership and operational responsibility is then transferred to the service provider who then repackages and prepares the pre-owned products as necessary for the market, and in some cases can even provide package design services if required. These providers often work in tandem with manufacturers to clearly identify the condition of items and the terms of sale, and to determine decisive channel strategies for the pre-owned inventory to avoid conflict of inventory flow into primary markets. Using the auction portal, inventory is then sold according to this strategy, which often includes second tier channels, emerging markets, and e-tail arenas. The right target price is based on the service provider's market intelligence, while by way of drop-shipping, the manufacturer can even disposition the returns directly from its channel partner's facility, thus avoiding the additional transport costs of bringing the material back to its premises. These program can generally be tailored to the needs of each manufacturer (who specifies and audits all refurbishment processes, but remains free from having to manage them), is the result of consumers showing an increasing appetite for refurbished inventory from well-known manufacturers that have a constant flow of returns.