

Obsolete stock

Any stockkeeper who has had to repeatedly move really slow moving or outright dead stock out of the way or find herself

hurting for space because obsolete product eats up square foot after square foot knows that these items "just gotta go."

Why You Have Been Told Not to Dispose of It

Why is the dead stock still here? The three reasons most often given as to why the product can't be disposed of are:

1. It's already paid for.
2. We might use it someday.
3. We might sell it someday.

These explanations seem logical and the idea of throwing away dead stock may be counterintuitive. Indeed, there are some very real practical problems with simply hauling it off to the dumpster.

Problems with Convincing Decision Makers That "Its Gotta Go"

Decision makers often have difficulty with disposing of dead inventory because it will adversely impact the balance sheet and deplete resources considered to be valuable for lending purposes.

- *Impact of write off* Anything that appears as an asset on the balance sheet has an accounting value. This value, consisting of an item's original cost minus depreciation, is called the "book value." It is irrelevant that the item may actually be worthless to either a customer or as part of a manufacturing process. If it has a one-dollar value on the books, then disposing of dead inventory has an accounting consequence to our organization.

If we sell dead inventory that has a monetary value at a deep discount, throw it away, or give it away to a charity, we will

have to immediately write-off the book value of those items, which will, of course, have a negative impact on the financial statements.

If your organization is sensitive to making extraordinary adjustments to the balance sheet and never or seldom writes off dead inventory, you may have a difficult time ever convincing any decision maker to dispose of these items. The decision maker will simply not be willing to "take the hit on the books."

- *Organization's capital structure* Almost everyone has heard the expression, "cash is king." The problem for many organizations is that cash flow doesn't always keep up with our needs.

Often organizations raise operating capital by borrowing against (a) their accounts receivable and (b) the book value of the inventory they are carrying.

"Accounts receivable" are the amounts due from customers resulting from normal sales activities. Depending on the industry, banks will generally lend up to 75 percent of the value of accounts receivable due in ninety days or less.

Bankers will also lend against the book value of inventory. The willingness to lend against this asset is not as straightforward as with accounts receivable. The more complex nature of these transactions comes from the fact that in accordance with accepted accounting practices, we should value inventory at the *lower* of cost or fair market value. Therefore, dead stock should logically be valued at a fair market value of zero dollars no matter what it originally cost.

In spite of generally accepted accounting practices and even though parts of your inventory have no real market value (and should be valued at zero dollars), bankers will often loan your organization 50 to 60 percent of the value of the inventory *as that value is shown on the books*. So, companies will sometimes continue to carry dead stock so as to retain this artificial value on

the books. This is an area most stockkeepers will not have any direct control over. However, the arguments below may overcome the need to keep inventory values artificially high.

Arguments in Favor of Disposing of Dead Stock

Strong arguments can be made in favor of disposing of nonproductive stock including recapture of space, better use of labor and equipment, plus a reduction in the costs associated with having inventory sitting around.

- **Recapture of space**

In terms of space utilization, there are some simple mathematical facts to keep in mind:

—Multiplying an item's length times its width tells you the amount of square feet the item is occupying.

—Multiplying an item's length times its width times its height tells you the amount of cubic space it is occupying.

If you were to actually figure out the cubic space taken up by dead product, you would gain a powerful argument in favor of disposing of this inventory. To bolster the argument, you may want to ask your organization's financial officer how much the company is paying per square foot for rent. Multiplying the square footage being consumed by dead product times the rent per square foot often results in a truly eye-opening dollar amount. Providing actual numbers to a decision maker is far more effective than speaking in generalities like, "dead stock is taking up a lot of space." Pointing out that obsolete stock is "taking up 4,000 square feet" or "represents \$2,000 per month in per square foot costs" should help you convince your decision maker that "its gotta go."

- Efficient utilization of labor and machine resources

Not only does obsolete inventory take up a lot of space, it can also get in the way of workers. Repeatedly moving obsolete product out of the way hurts efficient use of both labor and machine time.

Too often, in trying to argue against keeping obsolete stock, stockkeepers will state generalities like, "it takes us a lot of time to move that stuff around." How long is "a lot of time"? Is it an hour a day, four hours per week? Without specific numbers your arguments will sound hollow.

As many business writers have noted, "You cannot control what you do not measure." There are two things to do to get specific time and dollar amounts you need to:

—During each week for one month, every time you or your staff move dead product out of the way, measure the amount of direct labor that goes into that effort. Remember, if two workers are working together to move the items and they work for fifteen minutes, that represents fifteen minutes times two, or thirty minutes of direct labor.

—At the end of the month, divide the total amount of labor hours by four to determine a weekly average. To determine the amount of yearly labor involved in moving dead stock, multiply the weekly average times the number of weeks in a year your company operates.

Once again, obtain base information from your financial officer and multiply the average hourly wage you pay your workers, including benefits, times the annual labor number. The result will make a rather impressive argument as to how the organization can save thousands of dollars per year by disposing of its dead stock.

- Reduction of carrying costs (the K Factor)

The K Factor represents the number of pennies per inventory dollar per year a company is spending to house its inventory. It is generally expressed as a percent. In other words, a K Factor of 25 percent means that you are spending 25¢ per inventory dollar per year to house your inventory. A one dollar dead item that sits on your shelf for a year would cost you 25¢ that year, a total of 50¢ at the end of the second year, a total of 75¢ at the end of the third year, and so on.

There are two ways of computing the K Factor—a traditional method in which you add together various expenses directly related to carrying inventory and a rough rule-of-thumb method. See Exhibit 2–4.

Exhibit 2–4 Methods of Determining the Cost of Carrying Inventory

Traditional Accounting Method		Rule-of-Thumb Method	
Warehouse Space	\$ 130,000	20% + Prime Lending Rate = K Factor	
Taxes	65,000		
Insurance	40,000		
Obsolescence/Shrinkage	23,000		
Material Handling	64,800		
Cost of Money Invested	200,000		
Total Annual Costs	\$ 522,800		
Total Annual Costs	\$522,800		26% K Factor
Ave Inventory Value	\$2,000,000		

Since it always costs something to carry inventory, it is obvious that the longer dead stock remains in your facility, the more it will cost. Two approaches can be used to effectively argue this point:

1. Demonstrate the impact of carrying costs on your existing dead stock. This addresses the “We’ve already paid for it,” argument in favor of retaining dead stock. See Exhibit 2–5 and Exhibit 2–6.

Exhibit 2–5 Demonstrating the Impact of the K Factor on Existing Dead Stock

Assumptions:

- \$2,000,000 = Average inventory
- 25% = K factor
- 5% = Dead stock
- 18% = Gross Profit Margin

\$2,000,000	
x 5%	dead stock
\$100,000	dead stock
x 25%	K Factor
\$25,000	annual carrying cost
\$25,000 + 18% = \$138,889	

Amount company is spending to house unproductive inventory!

Amount company would have to generate at an 18% profit margin to have the funds to house the dead stock!

Exhibit 2–6 Creating an Inventory Analysis Report Listing Dead Stock

SKU #	DESCRIPTION	QUANT ON HAND	UNIT COST	DOLLAR VALUE OF PRODUCT IN HOUSE	MONTHLY USAGE	PROJECTED ANNUAL USAGE	MONTHS SUPPLY ON HAND

2. Demonstrate that if the product remains long enough, even selling it at a profit will not recapture your original cost. This addresses the “We might need it someday,” and, “We might sell it someday,” arguments in favor of retaining dead stock. See Exhibit 2-7.

In Exhibit 2-5, a percentage is used to indicate the amount of dead stock in the facility. Note, however, it is always more convincing to a decision maker if you use actual lists and dollar amounts to demonstrate those items that are dead rather than using a generality like a rough percentage. See Exhibit 2-6.

Methods of Disposal

Various approaches to disposing of dead stock exist:

- Sell at net price
- Temporarily raise commissions for salespeople
- Discount the price
- Return to vendor
- Donate it
- Write it off
- Auction

It is important to remember something about convincing decision makers of anything. Ordinarily, when reports or other information flow up a chain of command, the level of detail at each level *decreases*. Generally, each higher level of management wants to see less and less information with which to make decisions. You should resist providing only minimal data in making arguments regarding dead stock. This is a time to let the detail do the talking.

Exhibit 2-7 Demonstrating the Impact of the K Factor on Items Sold at a Profit but after Remaining in Stock for Long Periods of Time

Assumptions:

- 720 pairs of earmuffs purchased at \$2.25 per pair (\$1,620 original cost)
- Earmuffs have remained unsold for 2 years
- We hope to sell at a 30% gross profit per pair (\$2.93 pair)
- 25% K factor

$\$1,620 \times 25\% = \405 per year in carrying cost

$\$405 \div 720$ pairs = 56¢ per year, per pair
in additional carrying cost expense

Additional cost after one year:

$\$2.25 + \$0.56 = \$2.81$ /pair (720 pairs \times \$2.81 /pair = \$2,023)

Additional cost after two years:

$\$2.81 + \$0.56 = \$3.37$ /pair (720 pairs \times \$3.37 /pair = \$2,426)

Costs are going up \$0.002 per day ($\$0.56 \div 365$ days/yr)

\$2.93 sales price

-2.25 original cost

\$0.68 gross profit expected

$\$0.68 \div \$0.002 =$ breakeven at 340 days—after 340 days
there is no profit at all!

Original cost: \$2,500

Cost including carrying costs after two years:

\$4,449 ($\$2,023 + \$2,426$)

Revenue from selling earmuffs at \$2.93/pair: \$2,110

($\$2.93/\text{pair} \times 720$ pairs)

Loss on sale made after inventory has been in-house for two years even though sale made at 30% gross profit on original cost: \$2,339

Case Study: Balancing Carrying and Replenishment Costs

A dispute has arisen at the Charmax Co. between the purchasing and warehouse managers.

Charmax's receiving ends at 5:00 PM. At 4:45 PM, a 40-foot trailer is backed up to the dock. The doors are opened to reveal three levels of floor-stacked boxes extending from floor to ceiling, back to front.

Joe, the warehouse manager, realizes that it will take four workers at least two hours to hand unload the trailer. Virtually all of that time will be on an overtime basis.

Joe reviews the truck's manifest and determines what items on the trailer are needed for delivery tomorrow morning. He discovers that there are only three boxes on the trailer that are truly required for tomorrow's business. He asks Tracy, the truck driver, if he helped to load the trailer. Tracy replies that he did. Joe asks if Tracy remembers where those three boxes are. With a smile, Tracy replies that they are located in the nose of the trailer.

Joe decides not to incur the overtime. He will have the trailer unloaded in the morning.

Betty, the sales manager, hears that the three items will not be shipped to Acme, a large and important customer. She storms into the warehouse and demands that the trailer be unloaded.

Joe explains the overtime situation. Betty replies that Joe should have scheduled the trailer to arrive earlier in the day. Joe replies that the buyer, Bill, handles traffic management as part of the purchase of the product. Betty angrily says she doesn't much care. Joe had told her that the product would be here today for delivery tomorrow. "You promised me," Betty says, "so that's what I prom-

ised the customer. Now unload the trailer." Joe reluctantly does so.

Later, Joe confronts Bill and demands that product be brought in palletized or unitized or in some other manner so it can be unloaded quickly. Joe argues that since internal handling is a major component in computing the cost of carrying inventory, unitization will help cut Charmax's costs.

Bill responds that he has to buy the product as he is buying it now. He argues that to palletize the product would increase the costs per unit of product. He also points out that since the product already extends to the top of the trailer, that the added height of three levels of pallets at approximately four inches each, would force him to buy less per order so that it will all fit on a trailer. Therefore, he will have to buy less and buy it more often driving up his replenishment costs. Ill-will and stalemate result.