

Improving Inventory Turns

By Jason Bader, Principal

After a recent seminar, one of the participants reached out to me about his company's inventory turn rate. After learning how to properly calculate the formula, he realized that they had been overstating their turns for a long time and were lulled into state of complacency. When he looked that the real turn numbers, the results were less than stellar. They were of great enough concern that he felt his employment may be in jeopardy if a plan for improvement was not developed. Fortunately, creating a plan is easy. Execution may be a whole other story.

Like many companies, this one had been a victim of misinformation and comparison. I have always been skeptical of industry benchmarks when it comes to inventory turns. Not that the method of information gathering is flawed, rather the method of calculation by the reporting companies can vary greatly. Here is the proper equation:

$$\frac{\text{Annual Cost of Goods Sold from Stock Sales}}{\text{Average Inventory Value}}$$

Many companies overstate their inventory turns by inflating the numerator in the equation – annual cost of goods sold from stock sales. They do this by including all sales. This may include direct ship or non-stock sales. Remember, when we are studying inventory turns, we are trying to determine how well the inventory we have invested in is performing. The faster we turn inventory, the more times we are able to collect the gross margin associated with the product. When we perform a direct ship transaction, we are not using stocking inventory we have carried in our warehouse. We are relying on the supplier's inventory investment. This is why these transactions should be excluded from the calculation. In a similar vein, a special order of non-stock product does not rely on our stock inventory. Because we did not carry the product in our warehouse, it should not be part of our turns calculation. Don't get me wrong, both of these types of transactions are really good for distributors. They just don't need to be included in measuring the performance of our inventory.

Then trying to improve turns, we can attack the numerator of the equation, sell more stuff; or we can attack the denominator of the equation, stock less stuff. When working with distributors on this decision, I generally ask the question, "Where is the control?" Although we have some control over the numerator, sell more stuff, the customer generally dictates how much product they can consume. When we look at the denominator, stock less stuff, the discretion rests solely in the hands of the stocking distributor. Because we have ultimate control, the denominator is where distributors can make the greatest improvement in inventory turns.

As many of you know, I tend to rely very heavily on a reporting tool called the hits report. It is my go-to tool for a majority of my inventory consulting engagements. As a quick reminder, the hits report analyzes the number of times an SKU appears on a sales order in a 12 month period. Quantity sold is not relevant to this analysis. In this report, I generally want to see these columns:

1. SKU
2. Quantity on Hand
3. Unit Cost
4. Current On Hand Investment
5. Hits
6. Average Monthly Usage
7. Months of Inventory on Hand

Some distributors have found it useful to add an item description column and package quantity column. The report should be run **by location** for our purposes. There are benefits to a company-wide report, but not for improving turns. From this simple inventory movement analysis report, we can formulate a plan of attack designed to reduce the average inventory value without jeopardizing our customer service level.

With this client, my first suggestion was to rank the report by the number of hits in descending order. His first task was to segregate any item with less than 4 annual hits. These items are clearly not the favorites of your customer base. Since your customers don't seem to be supporting them with their wallets, should we be carrying them with our wallets?

The simplest answer would be to convert all these items to non-stock status. This doesn't mean that we can't sell them. These items would just be sourced rather than stocked. Since they are so infrequently purchased, the additional time spent on sourcing should be minimal. Before we get out the broad sword and kill all of these items, we need to identify a few potential exceptions. Some of these items might be part of a greater whole. I tend to view repair parts in this manner. Keeping a few on hand is probably a good idea. You may have a contractual obligation with a customer. Just make sure it is one that pays you on a regular basis. You may have an obnoxiously high gross margin on the item when it is sold. As long as you don't break it in the several months it sits on the shelf before you sell it, I can live with this one. All others should be converted to non-stock. Let the liquidation proceedings begin.

My next suggestion with this client was to look at the surplus inventory from the last column of the hits report. I asked him to rank the remaining items, after moving the slow and dead to non-stock status, by months of inventory on hand. The next step is to isolate the skus with several months of inventory on hand. I generally isolate anything with more than 8 or 9 months of inventory on hand. This is the first shot. I can dig deeper, meaning 6 or 7 months on hand, if I don't have enough targets. For most distributors, 9 months is a good start.

Take this newly isolated group and re-rank the items by current on hand invested in descending order. Start looking at the big dollars. Why do I have this much on hand? Is it because of a manufacturer package size? Did I buy at a higher quantity to get a lower price? Are my buyers using gut feel versus the inventory replenishment system we paid for? Is there a bad min or max number in the system? Do some research and find out what is causing the inflation. Take appropriate corrective action.

In order to set a goal for yourself, take a snapshot of the slow and the dead items. How much money do you have sitting idle? If you reduced your average inventory value by this amount, what would your inventory turns be? This is a good first goal.

Determining the surplus dollars is a bit more challenging depending on your software. First, you would need to know the maximum quantity on hand, for any given sku, for optimal replenishment. Then you would subtract this from the current dollars on hand. This may be more analysis than you are ready to handle. If you are able to determine an amount of dollars in surplus, subtract this from the new average inventory value. Re-run the turns calculation and see where it takes you.

If the spread between your current inventory turns and your first goal is greater than one full turn, don't expect to hit your goal in the first 12 months. It often takes more than a year to improve one full turn. Set a goal of half or three quarters for that first 12 months. A great deal will depend on your ability to convert these captured assets into cash. Liquidation of inventory is a whole other subject of discussion.

I will freely admit that there are additional methods of improving turns. Consider these methods the low hanging fruit. This analysis will yield the largest group of captive dollars. Once you feel like you have exhausted these first two areas, give me a call. I will be happy to introduce you to some of advanced digging tools. Good luck.

About the Author:

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