

Inject Some AIR (Accelerated Inventory Reduction) into Your Recovery

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I often use the analogy that excess inventory is like swelling or middle-aged “softness.” It’s not the problem itself, but a symptom of an underlying issue. In normal business circumstances, when a business values working capital utilizing their WACC (weighted average cost of capital), excess is not a problem because it is relatively cheap. A company can go on a “diet” and those inventory levels can be easily reduced with time and effort. However, the ROI on inventory reduction is comparatively low and the perceived risk is high. What if we don’t have the luxury time? What if we are in a liquidity crunch? What if we need to reduce that swelling and lose inventory “weight” in weeks, not months?

As demand vanishes and product mix shifts, companies often struggle to cut costs fast enough which results in burning through their cash reserves and revolving credit, causing a liquidity crunch. The real problem comes when that critical liquidity is unavailable for recovery, posing a threat to survival or market position. The more cash is tied up in inventory, the less is available for other, much more valuable uses of cash.

So how can I effect such dramatic action during a liquidity crunch? First, let me explain *why* it is so critically important to lean out inventory as much as possible—far lower than comfortable, but still safe—then outline tried and true tips I have used in my career to accelerate the outcome.

Indoctrination

For those of you not truly familiar with the finer intricacies of inventory, let me first provide some quick philosophical background. Inventory should exist only to create stability and consistency in a process or system constraint. In other words, ensure your constraint has material to run at all times, bundle product to save on freight, leverage volume to save on unit cost, and ensure product is available to the customer despite uncertain demand or lead times. That is the role of inventory.

To state it most obviously, when inventory is well managed and protective buffers are working correctly, inventory that moves through the system quickly is good, and inventory that does not is bad.

In all businesses, *quickly* is certainly relative, but per our liquidity crunch, the economic math upon which quickly is calculated (i.e. how long the capital is tied up) has now changed. So, while we want to maintain efficiency and a high level of service, that additional inventory is slowing down your cash conversion cycle.

The Liquidity Crunch

Let's make a key assumption—if I emerge from crisis mode with cash or credit to invest, then I will be faster to market, gain market share and dramatically improve long-term investor returns.

Makes good business sense, however, this also presents two challenges:

1. it takes *additional* inventory and working capital to pivot your supply chain
2. common inventory valuation does not work during a company liquidity crisis

The Pivot

First, for all companies (not just the well capitalized ones) liquidity is critical when emerging from a crisis period. It is a fundamental enabler of agility, which is a company's ability to pivot their supply sources, adjust product mix and re-align sales channels. With liquidity, a company can invest in the new inventory required to make the pivot, which in my 20 years of real-world experience can typically require between 60 and 180 days of inventory.

Why does a pivot require so much more inventory? As stated previously, inventory is easily justified as protection against variability. Therefore, when a company pivots to a new supplier or product, overall inventory can as much as double to ensure a smooth transition before returning to a more normal level. In a worst case scenario, the obsolete inventory can become stranded, resulting in the permanent loss of that cash— the dreaded write off.

Inventory Valuation

The other issue is how we value inventory. On a balance sheet, inventory is valued at cost. But decisions to *reduce* it are often made using its impact on the P&L (its periodic expense). This is usually calculated using some variation of the inventory holding cost formula that includes WACC, warehousing, salaries, transportation, taxes, insurance, depreciation, shrinkage, and *opportunity costs*. The holding cost estimate allows companies to value reduction efforts against other cost saving activities and thus prioritize their focus.

However, the major flaw in this way of thinking (at the moment) is that the underlying key assumption—access to capital is cheap and easy—is no longer valid. The company WACC is no longer a relevant part of the value equation since the whole company is competing for a limited pool of cash. Therefore, the *opportunity cost* effectively replaces the WACC as the main driver of inventory's relative importance to business operation. The opportunity cost is very different for each individual company, but let me suggest a few guiding principles:

1. When the economy shuttered in Q1 2020, cash stopped flowing and companies struggled to adjust expenses fast enough to maintain a healthy cash conversion cycle. Thus, the pool of liquid cash available to support the purchase of inputs and conversion expenses is in high demand, or has dried up altogether.

2. There is cash in the system, but it is just tied up in working capital (i.e. inventory). However, companies must spend money (use cash) to convert their existing inventory into liquid cash (revenue). The decision-making process of deciding to invest the limited cash into new inventory or conversion expenses creates the opportunity cost. The more limited the cash, the higher the value (or penalty) of making the investment in the right place.
3. The social impact of other cost cutting measures is also unmeasurable. Consider the impact to employee moral when extreme cost cutting measures are implemented like furloughs, 401K match elimination, bonus elimination and ... God forbid, switching to generic brand coffee. The risk is losing good employees, or at the least, damaging productivity. Either of which will cost a significant amount of money and shareholder value.

So, in lieu of a providing an exact calculation of the current value of cash in the future, let me suggest an alternative. Start with an unreasonably high number and socialize around your company to arrive at a universally agreed to number (if you can) that estimates the current value of that cash.

As a reference point, in my latest effort as a practitioner, my former finance partner and I arrived at 18% as an effective estimate to reflect our revolver position, opportunity cost and operating expenses. I would expect that if your company is in a crunch, the value will likely be even more than that. Therefore, the \$30MM (or 19%) that our team took out of inventory had an additional cost impact of roughly \$5.6MM. This becomes a reasonable incentive for the company to prioritize an accelerated inventory reduction effort.

Moving the Needle

Let me first provide an obvious warning for this section:

“The “motherhood and apple pie” I am about to subject you to is not going to move the needle itself. You still must execute!”

While the prescription below all makes sense (like going a diet or resting an injury), it will also create tempting distractions, sound multiple sirens and result in copious cheating. This is not sexy or fun, and in very few ways is it rewarding. It takes an enormous amount of grit and focus, which explains why it is the way it is. As all the awesome teams I've worked with can attest, it is a thankless load of work, which at the end of the day is seldom celebrated with the same enthusiasm as a big contract or savings project.

Fortunately (are you still with me?), there are plenty of opinions about inventory for you to use in finding the right answer. There is not an MBA or finance professional who lacks the propensity to unequivocally declare that inventory is too high. On the contrary, sales and operations will no-doubt warn of the impending doom (lost production efficiency or revenue) from reduction.

So how do you actually move the needle without losing sales and efficiency? I have personally participated in more of these declarative moments than I care for. But having successfully achieved that goal multiple times, I can absolutely vouch that it *can* be done, and without dire implications.

Like all good business writing, I will offer an arbitrary number of previously unknown secrets that will lead you to inventory nirvana (or at least get rid of the swelling, muffin tops and beer gut).

1. take OWNership and streamline decision making
2. create true visibility
3. change your assumptions
4. change behaviors (by adding red tape?)
5. measure (and celebrate) results

Take OWNership and Streamline Decision Making

My favorite question going into a new client is to ask who “owns” inventory. There is very rarely a straight answer. As an aside, I have “taken ownership” of it before and creates a bit of a target on your back. So there is a good reason few people want the accountability, and few who might be assigned the responsibility have true incentive to keep it lean.

That said, it’s a *must*. There has to be a final say—an arbiter if you will who ends all discussions and decision making. The ideal qualifications include someone who has independence (relatively) of commercial and operations, and is extremely well versed in the applied mathematics behind inventory level determination. Strong support from a competent finance team is also very helpful.

After assigning an owner, companies need to streamline decision-making. My method involves forming cross-functional value-stream oriented teams that are responsible for reviewing every raw, WIP and finished good in that stream to re-think its existence, develop actions and accountability to take out the waste. The reason for cross-functional teams is that you have to be creative about how you convert inventory into cash. Obviously writing it off is not helping, so the task is to sell it, rework it, repack it, return it, or find some other way to convert it into some value. To do this, commercial, ops, procurement, R&D and finance all need to be at the table to participate in the decision making and take ownership of actions. Teamwork at its finest.

Create True Visibility

Inventory is never perfect—it’s always a little outdated, a bit (or a lot) wrong and always moving. But that shouldn’t stop you from creating visibility. However, with the growing complexity of supply chains, it’s now tougher to get true end-to-end visibility. Everyone along the chain protects their own process and commitments. Thus, when you add up your supplier’s inventory, your inventory (raws, WIP, finished goods, in-transit) and customer’s inventory the cumulative “safety” stock typically far exceeds the statistical system variability that inventory is designed to protect against.

Fortunately, *if* the project is prioritized for investment and IT has bandwidth to support it, today's tools are incredibly effective at extracting and displaying information in limitless ways. The trick is to focus on information, not data. Fundamentally, there are only a handful of critical elements that, when stitched together, create a diagnostic tool that allows you understand what specific inventory is productive and what is excess; and create visibility on specific actions and progress (or lack thereof).

Fancy systems that show you everything in one dashboard are not required for you to be successful. I have almost always overcome very poor visibility with a tremendous amount of manual effort and a few rock-star analysts (you know who you are). In addition, there is often a faulty connection between detail and book numbers, but it is never worth your time to research the differences. Trust that if you move one, the other will follow ... and just leave the explanations to the finance team. Your focus must always be on the outcome—converting inventory to cash.

Change your Assumptions

Literally. Your safety stock levels contain logic that leverages assumptions for the purpose of estimating a safety stock requirement and reorder/replenishment points. That in turn drives material replenishment signals throughout your supply chain. As a starter, seriously question each of these metrics: future usage, service level, EOQs, MOQs, EPQs, packaging quantities and transport quantities. It is amazing just how much the inadvertent multiplication of all these assumptions throughout your supply chain results in slow moving or obsolete inventory.

Changing your master data frequently is typically not an institutionalized practice, but if the assumptions change, so should your data. Be prepared to spend the time getting this correct. At worst, this should be a quarterly hygiene activity anyway.

Change Behaviors (by adding red tape?)

Let me share a personal true story. While working with one firm, I globally inserted myself in the approval process for every purchase that exceeded a certain amount, and asked everyone on the procurement team to provide me with a subset of information to help guide my decision (e.g. usage, hard demand, safety stock level, etc.).

At the beginning, I received spotty information or would have to go back and ask for more detail for each request. That painfully slowed the process down (certainly not a lean practice or good for the size of my inbox). Ultimately though, the purchasing team quickly began to anticipate what questions would be asked and started asking them of themselves. By educating the team about my decision-making process and helping them understand the thresholds, they began to take ownership and stopped submitting REQs just because the system said so. You will quickly learn that the keys to the kingdom (at least in manufacturing and distribution) are held by planning, scheduling and the buyers. Change their behaviors by empowering them to think for themselves and you meaningfully move the needle.



Measure (and celebrate) Results

Like most things in business, you get what you measure. Like Sisyphus, you face a never-ending uphill battle if you don't include incentives or fail to maintain consistent measurement, clear visibility, and stretch targets enforcing outcomes that the business needs.

Remember the warning label for this segment? The inventory team will get all of the blame when the plan fails and only a little bit of glory when it succeeds. But if a company finds the right leader, empowers them to execute, and provides the right team and tools, positive business outcome will almost undoubtedly follow.

Conclusion

First—quit fooling yourself. The cash you have tied up in inventory is real and it's really hard to extract. Stop sitting on your hands and pretending that your current processes will magically extract it.

Second—go get 'em tiger. If you are looking for a champion and can't find one, then perhaps it is you. I am confident that the effort will be absolutely rewarding for the business, your colleagues, and the company's shareholders.

As a final shameless plug, if you need help or want to discuss the opportunity for your business further, reach out. SCMO2 is here to help. I have been doing this for more than 20 years, and would be happy to share some insights with you directly.

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