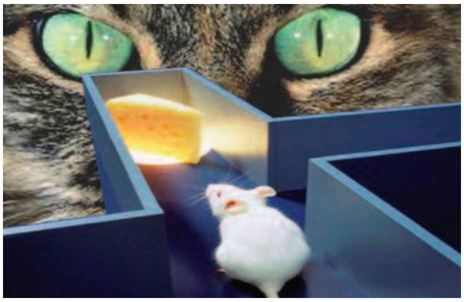
INVENTORY MEASUREMENT

We all know the saying, "Be careful what you wish for, 'Cause you just might get it". In inventory, we also need to be careful what we measure for.



When we don't fully explore the implications of our measurement and incentive systems we often stumble into traps of our own making. This article explores some of the pitfalls or collateral damage that can arise when we focus on an immediate reward and lose sight of the bigger picture. It also suggests some principles that ought to be considered when designing our measures and incentives.

Some traps for the unwary

We are all creatures that shy away from risk and much prefer reward. That reward could be a monetary one. The bigger, the more we react. It might just be a matter of the way that measures feature in a performance evaluation or a weekly meeting. Where do we focus? How can we balance what needs to be done to maximise our personal rewards?

Many branch networks are incentivised around gross margin. This can on the surface appear a very sound way of managing desired behaviours – we find the path to maximise gross margin and in turn net profit. However remember that gross margin equals revenue minus cost. Obviously if we keep the selling price high then we can keep gross margin up, but there are some side effects we might not anticipate, including:

- Buy-ins are a fact of life in many businesses. With a gross margin oriented incentive it is often all too easy to buy an extra five or ten pieces to get a buy break, so as to lower the cost for the current sale. The problem is that you may also incur a lot of carrying cost and write down risk if you are not careful and have the right delegations and controls in place.
- To what extent are the costs real and transparent? For example is the cost, a retail branch cost or perhaps a shadow or wholesale cost. Has some wholesale profit been built into the cost visible to a retail branch? This can create some perverse effects like a branch not capturing a sale for a product that makes a high wholesale margin because they cannot discount sufficiently to achieve a sale. Of course where you do not make the sale you may damage the success of a brand or product range and reduce inventory turns.

You can do even worse if you just measure revenue and not gross margin. You can build too much inventory that delivers too little profit and ultimately deliver a very poor Return on Investment (ROI).

If you focus too much on profit or expense then you inevitably worry about the overheads that are built into the price and people can spend too much time arguing about overheads.

When it comes to more direct inventory measures it is all too easy to employ dangerously simplistic approaches too. For example:

- Focusing too much on top line turns or months of stock. That can disguise the need to carry maybe six months of cheap o-rings where you don't mind the extra holding cost compared with the transaction costs. It is very dangerous to adopt a 'one size fits all' approach, particularly for inventory.
- Treating all excess the same. An extra month of slow moving stock where you might normally stock only one or two pieces might not be that serious i.e. you expect to hold five to six months normally anyway. But what if you hold an extra month of a fast mover that has a well behaved forecast and a reliable supply situation? That could be a serious drain on working capital and compromise your ability to range other high margin products.

Focus on ROI and Profitability

Return on Investment is the ultimate focus of most business. Growing revenue, share and scale could be strategically critical, but ultimately there is little point pursuing means that don't ultimately deliver target ROI levels and profitability. Each component of the P&L and Balance Sheet needs to be driving towards ROI. This sort of focus then drives different behaviours including:

- Not getting sucked in to accepting MOQs (Minimum Order Quantities), buy breaks or rebates that force you to over stock and may reduce ROI. Each purchasing decision needs to consider all these factors. Ideally this should be supported by your inventory management system.
- Trading off inventory holding costs versus your transaction costs.
- Putting a high margin on a very slow turnover product, and being prepared to accept lower turns. The more dust, the higher the price.

Principles for Performance

So what are some of the things that need to be in place? We suggest:

- Ask what the strategy is? Profit and ROI are ultimately a result of an effective strategy. If you have resolved to become the supplier of first choice then you will probably need to manage a broader range and the slower moving products usually associated with such a strategy. Is the supply chain strategy and inventory deployment matching this strategy? Do the gross margins, expenses and inventory holdings deliver optimal ROI?
- Be holistic and look end to end across your supply chain. It can be too easy to have a product manager destroy ROI through overstocking. A branch manager can ignore excess in another part of the business. Is everyone working together?
- Make sure measures help you understand the subtleties. Achieving a DIFOT might be important, but it might need to be supported by KPIs that tell you how long your customers have to wait if you have not got what they need. Your business survival might just rest on something like that.
- Make sure your financial and master data is accurate. Our software will consider over twenty different variables when optimising stock levels. While it can be resilient to some dirty data, it obviously works best when the data is accurate. The process and product management disciplines need to be in place to maintain quality decisions.
- Be transparent and clear about what you are trying to achieve. Maybe it's time to look at using discount delegations rather than hiding costs in wholesale margins. If we hide things and try to be too smart we can limit the effectiveness of the inventory optimisation tools that are available and can automate decisions.
- Put in place the right portfolio of measures for each role and understand (in detail) how the behaviour of each staff member will be influenced by them. Are they rewarded to max out on Gross Margin but destroy inventory turnover? Are the measures balanced and channel behaviours towards an overall goal?

The Rules need to Reward while Minimising Risks

Obviously there are many factors to consider when designing and implementing the right measures for an inventory management system. The important thing to remember is that the rules of the game drive how people play. They even drive the kinds of players that will rise to the top. Just look at the different football codes and the very different physical attributes of those who succeed in AFL, soccer, rugby, league and NFL. A star soccer player would likely get smashed in rugby, league or the NFL for example. Smart organisations will review the benchmarks against which they measure themselves, and the personnel, their remuneration, and the tools that are employed to deliver their results. They will play a smarter game.

For further information consult www.horizoninventory.com.au or email info@horizoninventory.com.au.