WHY WEEKS OF COVER IS JUST TOO WEAK

"So how many weeks of cover does that translate to?" Sounds a perfectly reasonable question doesn't it? But, is it?

Before we answer, let's get behind the original question and understand:

- Who asked the question – it could well reflect their experiences and the disciplines they have practised, perhaps in a different industry or professional role.
- Why the question was being asked? Is the answer to be evaluated against some idea of a 'reasonable' benchmark for each and every product?
- Does the question reflect an approach embodied in an ERP system with which the person is familiar?

Unfortunately all too often 'weeks of stock' (or equivalent 'days/months of stock' phrases) is bandied about where people have only been exposed to overly simplistic approaches. Or perhaps someone has explained more thorough and rigorous approaches, but overwhelmed by emails and the complexities of their marketing role or financial ratios and KPIs, it is simply too much to deal with the complexities of proper inventory planning too.

On the face of it, 'weeks of stock' might appear to be simple to understand, and therefore attractive. It can be simply calculated and implemented in an ERP system and it can be simply measured and reported. But does that make it right?

Ask the wrong questions and get the wrong answer

Let's think about how, where and why 'weeks of stock' might fall down.

Firstly, you normally multiply 'weeks of stock' by a forecast or average demand number. If it is an average of recent sales, has it been adjusted for lost orders when you were short of stock? If it is a forecast, does it reflect the upcoming promotion?

In any event, for example, if you are selling two a month and you wish to hold four weeks of stock, then that translates to holding two units in stock. But is that a min, or is it a max? Why was four weeks chosen as the multiplier? What was so magical about four? What happens if the demand falls to 0.1 a month, i.e. about one a year? Holding four weeks would mean holding 0.1 in stock, so let's round that up to 1. But what happens if the item is only ever sold in twos? In that case we would not want to hold any less than two. But with such a low demand, maybe you should stock nothing. The simple fact is that with questions that are too simple, quite simply it is all too easy to get the wrong answers.

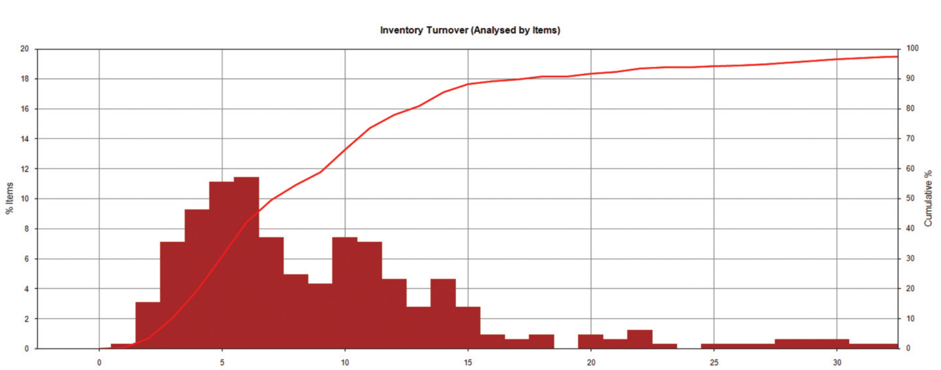
Better questions

So what sort of questions ultimately need to be asked, maybe not by finance or marketing management, but certainly by inventory and supply chain professionals?

Better questions, which reflect the required level of detail include:

- In what quantities are the parts consumed? If they are bought in twos and fours, having stock of one or three or five is not very smart at all.
- How popular is the product?
- Where does it sit in its life cycle?
- To which vehicles does it attach and where are they in their life cycle?
- What is the predicted rate of consumption and how variable is it? You need very different amounts of inventory if the demand is very predictable versus being in intermittent bursts of varying sizes and frequencies.
- When does the customer want it and how long will it take to get it? Maybe there is time to source the product without stocking it all the time.
- What is the unit cost? Do handling costs prohibit processing too frequently? Or if it is very expensive, can you find a way to hold only one in stock?
- What are the transport costs throughout your network? How do they influence what you stock and in what quantity?
- Do you make a high gross margin from each sale? If so, maybe it might be wise to carry a bit more.
- How are the products received from your suppliers and how should they be moved and stored? Is it prudent to manage the stock in 'convenient' quantities?
- Oh, and what happens if the answers to the above change?

Without going any further, you can see that answering all of the above questions might produce very different answers from one product to another.



In the graph, which is taken from a tool we call the Levels Tuner, you can see that many items have four, five or six weeks of stock on average but some items end up with 30 or 40 weeks of stock. Clearly this is not a case of 'one size fits all', as different items have very different 'weeks of stock'.

The reasons for the differences relate to very different answers to each of the questions. It is OK to have 40 weeks of stock for a cheap o-ring (relatively expensive to process and count, very low obsolescence risk and level of inventory investment), but most definitely not OK for a gearbox (high capital cost justifies more careful consideration to avoid excessive inventory carrying costs). The right answer for each item involves answering about 20 different questions and then optimising the resulting overall answer.

Higher level questions with smarter answers

Of course you quite simply cannot answer 20 questions on every item in your large portfolio. This is especially true if you are a finance executive and not an inventory or supply chain professional, but even then, no one has the time to stay on top of all the questions for a large product portfolio.

It is important to have a tool that answers all these questions for you. Ultimately, you have to answer some far more high level questions, like:

- What service level do you need to compete effectively and feasibly in your chosen market segments? Remember that you need to set your service levels high enough to be the first choice for your customers but not so high as to require massive inventory investment.
- What Net Profit and Return on Asset objectives do you have and what risks will you accept in pursuit of them?

If you can spend time thinking more about these sorts of questions and maintain your master data so the system can in turn answer all the lower level questions, you will in the end, achieve far smarter answers. If you are an inventory professional then you can help the people who are not so adept in the inventory arts to look at inventory management from a more appropriate perspective.

Oh, and yes, by the way, you can find out how many weeks of stock there are in your optimised portfolio, not that 'weeks of stock' is anywhere near as important as service level, market share, profitability and ROA. Maybe the question now is, is it time to ask the higher level questions and come up with better business results, rather than an intermediate outcome like 'weeks of stock' which could inhibit your performance from being really strong?

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