

FOCUSING ON THE 'WHY' IN INVENTORY

The letter 'y' in inventory is at the tail end of the word and all too often when it comes to spelling out inventory policies and strategies, the 'why' is not at the forefront.

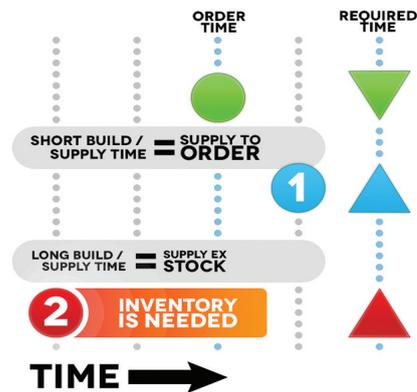
Often, businesses simplistically hold, for example, two months of stock across all products, and then end up with poor service levels or excess or both.

Smart inventory management starts with asking some basic questions and periodically revisiting them as business capabilities and conditions change.

This is the first in a series of articles on inventory from Horizon Inventory on this topic, covering why we need inventory and why we need inventory management. Later in this series, how this can be done most effectively will be examined.

Why hold inventory?

In very simple terms it is mainly about time, although that can be influenced by other factors such as product quality and cost. Let's examine the question by looking at the two cases of supply to order (case one) and supply from stock (case two).



Assume that a product is required in two weeks (read weeks as days, or even hours if you wish). That is, the firm requirement for the product is known actually two weeks before it has to be in the hands of the ultimate user.

If the part can be made and supplied at the right quality, price and cost in just one week then for that part we have a "supply to order" situation, something where we require actually no inventory at all. Timely information in this case can be used to eliminate the need for inventory.

If in case two, however, the product, perhaps because of a sourcing decision, can only be built or supplied in four weeks, then we need to have some inventory. Unless of course we have absolutely perfect forecasting which exactly anticipates future demand and we have a perfect supplier, who is 100 percent

reliable – this is unlikely in any industry.

Before we explore the answers to 'Why hold inventory?' it is wise to step back from the immediate question and ask an even more basic one: "Why is the product required at all?"

What does the final consumer/end user want or need to do with the item that is ultimately supplied? If it is a small cheap product that is critical to the operation of a major piece of capital equipment like a large truck or a piece of mining equipment, then often the consumer will be prepared to pay a substantial premium. That means that a fast but costly manufacturing and supply process may be the optimum solution for the consumer and the supplier.

However, if the purchase of the product is more discretionary, the decision is a price sensitive one and the manufacturing-supply economics require high volumes, this may force a long lead time supply situation, such as in case two, and therefore you will need to carry inventory, and hold it as cost effectively as possible.

To answer the original question, "Why hold inventory?" the answer is "It depends"

It depends on many factors. To maximise the apex business objective of return on assets, just some of the factors you need to consider are the following.

Is your product amenable to new manufacturing technologies such as 3D printing, so that you can significantly reduce the supply/build time? This may be at a premium today but certainly for some lower volume applications the cost and capability may be feasible.

What is the dominant cost driver? Product costs, manufacturing and supply process costs or holding costs? Holding one month of stock might be the right decision for some products but for a one cent o-ring, perhaps six or 12 months is better.

If you can use vehicle registration data and full visibility of retail sales to improve forecasting then you can afford to hold inventory more easily and therefore change sourcing to perhaps longer lead times and lower costs. This is more likely to be feasible with higher volume products.

What can you do to change the flow of information? When do you as a supplier know about the requirement for a product? When the vehicle is on the hoist, or when it is booked in



for the service, or the upgrade? This sort of information could alter dramatically the inventory management options you have. Reflect on the impact that online shopping from smartphones has had, and the impact it can have on how products are stocked and supplied.

You also should consider the product's popularity, the relative gross margin, supplier reliability, cost breaks, MOQs, pack sizes, common quantities in which products are used, relationships between products, seasonality, product life cycle, geographic coverage, strategic and competitive position - and risk - all of which will influence whether to stock and how much.

A complex balance that can be made simple

Some products will lean towards "supply to order" and some towards "supply ex-stock". In fact when you look at it, there are over 20 variables that need to be considered for every stocking strategy decision for every product.

Sounds complex and time-consuming? It might sound like a big effort but it actually can be done and done well. You need tools whereby you can set the right policies as though you had the time to make the "right" decision for each and every product, every time. Then you need to automate as many of these decisions as possible, so that you can handle thousands of SKUs according to best practices and to meet multiple business objectives in a balanced way across your product portfolio.

In future articles, we will explore some of the approaches that can help with such best practice inventory management.

Meanwhile, take the time to reflect on why you hold inventory and think through some of the above factors as they apply to your business, to a greater or lesser extent.

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