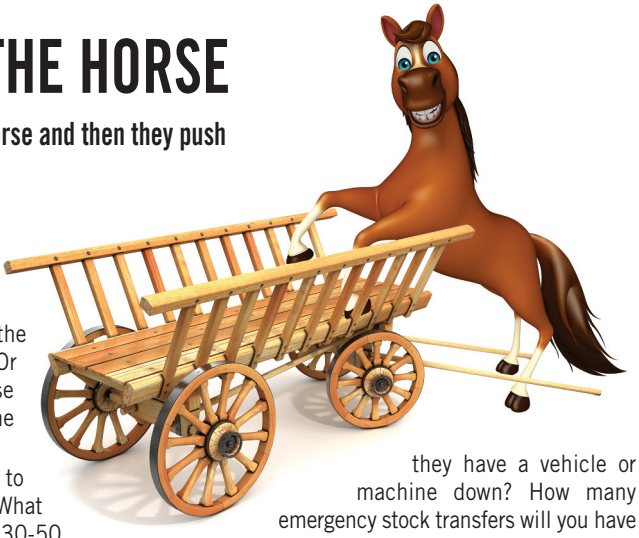
AVOID PUTTING THE CART BEFORE THE HORSE

I know you would never do it, but some people do; they put the cart before the horse and then they push things uphill thereafter



Take for example:

- An organisation that buys a warehouse in perhaps the wrong city or even country, and then discovers that it is very difficult to service demand in other locations due to transport difficulties and costs.
- A warehouse that is not sized to handle the capacity needed for stock or the volumes of movements needed for the mission that the warehouse is designed to fulfil. Only after commissioning, do management discover that to run the DC and branch network they must slow down the replenishment volumes and pick more units per pick. This increases the branch inventories simply because the main DC cannot reach the optimal pick volumes. And of course, if things are not sized properly you often have to compensate by adding in a third-party warehouse for offsite storage. Then there's all the double handling and complexity that this could mean.

Sound familiar? Well unfortunately you do hear of these kinds of issues too often, and they are avoidable with some good planning, some modelling and some critical analysis. Some thought and effort up-front can help you avoid being behind from the outset.

Better to take a systems view

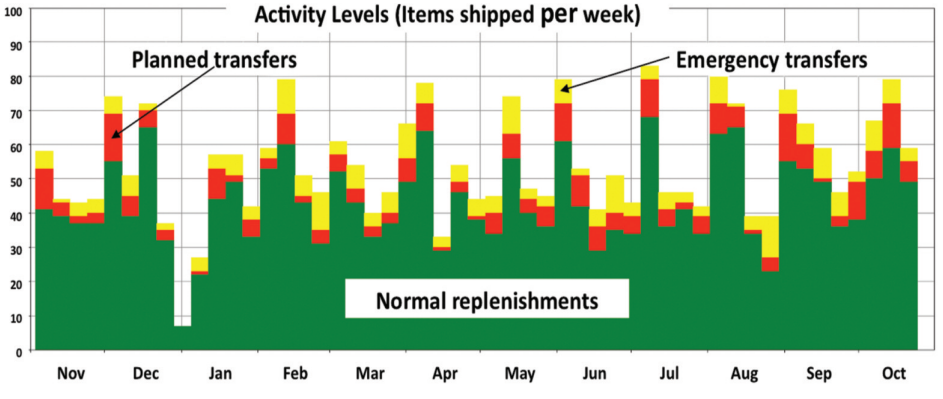
In many aspects of business, it is better to correct faults when systems are designed than when they are built. This is true for many engineering projects, for building and construction, for information technology systems and also for supply chains and warehousing. If you get some racking wrong, you can probably fix it fairly easily, but if you totally change the way your supply chain connects together, you need to be prepared for some serious costs.

So, what do you need to do? It helps if you can:

- Look at the complete supply chain and understand and model the flows of material from the primary point of importing or building through to the point of consumption or sale.
- Understand not just the volumes but also the way they vary over time, over seasons, through the month and during the week. How often do you reach movement levels that overload your capabilities and start to damage your service levels?
- Understand the balance between what you stock in a warehouse and what you might deliberately decide to stock higher up the chain. Inevitably, if you decide not to stock something locally, perhaps because of the rarity of its demand or its high capital cost, then you are also in effect committing to move it fairly quickly to the customer or user when it is needed. Can you handle or pay for the emergency stock transfers? Or might it be better to increase the stock holding and avoid the emergencies?
- Understand the scenarios to which you must be sensitive. What happens if volumes grow by 30-50 percent? Will your capacity cope? What happens if transport economics change? How might that cause you to press up against your storage limits? Can your layout accommodate such an increased load?

Better to Model before you Make

Many people attack the challenges of what to do with far too simplistic approaches, using things like Excel, some simplistic stats and a few formulae. These rarely account for the variability and other issues that will be encountered.



It is far better to use a tool like one of our tuners which can help you see how different inventory policies translate into different activity levels in your sending and receiving warehouses and along your transport lanes.

You can see what happens if you decide to replenish weekly, twice a week or every day. You can check the number of picks, packs, ships and receipts you will experience on a weekly or daily basis. You can size the level of transfers that might be needed over and above normal replenishments. How many planned transfers (long lead time orders for planned maintenance jobs or big orders for stock builds at distributors) might be needed?

Can you plan to cope with these as they have known or different service level needs than the kind of expectations that customers have when they have a vehicle or machine down? How many emergency stock transfers will you have with different inventory management policies? It is important to know this all up front because emergency stock transfers typically cost three to five times as much as the transport and processing costs required for a normal replenishment.

And you can use these kinds of reports and graphs to illustrate the effects that different 'wishes' translate to. Sure, you can have a 99 percent service level, as long you have 50 percent more space in the warehouse. But if you have a service level of 95 percent, you have to plan for a certain level of emergency stock transfers. Can you cope with that too?

The value of doing this sort of modelling up front is it helps you assess the way different supply chain and warehouse systems might work best given your current demand and operational and cost drivers, and how well they might respond to changes in your environment.

It is much better to be harnessed up in front of the cart and leading the way, than to struggle to negotiate the road ahead from behind…or at least, that is what we endeavour to help people do.

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