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Survival of the fittest

The short-term response to Covid-19 for supply chains

Summary:

- **Covid-19 is affecting organisations in different ways and the situation is still fluid**
- **Prioritise cash. Suppliers are fragile too so focus on inventories**
- **Distrust forecasts and match supply to demand as much as possible**
- **Prioritise your most important products**
- **Gain and maintain transparency throughout the supply chain**
- **Smooth supply as much as possible to counteract bullwhips**

Covid-19 represents a very different supply chain challenge to that created by the Fukushima earthquake of 2012. The disruptions are more global, longer-lasting and, above all, felt on the demand side as well as the supply side. Lockdowns in many countries have all but dried up end-consumer demand for some products, while sending demand for others soaring.

Every company and every supply chain is unique, so it is hard to come up with a plan of action that will work for each, but in this white paper we will attempt to suggest a number of measures that should help whatever your situation. We will also try to highlight a few things to avoid.

In the short term, the imperative is survival. But the organisations that will come out of this situation the strongest will already be thinking about the longer term. While this white paper will focus just on the short-term response, look out for our other papers on the mid-term response, “Back to normal”, as well as the long-term response “The new normal”. Now is the perfect time to think about those longer time horizons too.

Survival of the fittest

In the first instance, the priority of every organisation must be the health and safety of its employees, customers and suppliers.

Assuming this has been assured, most organisations have by now set up some kind of “war office” to deal with the situation. The role of such an office is to provide overall strategic direction to your response while staying abreast of major external developments, in terms of policy, available government support, market conditions, and so on. But how specifically should organisations adapt their supply chains?

The biggest concern for any organisation should be its cashflow. This is the life-blood of your business. Before the crisis, a major focus of working capital initiatives was too often squeezing suppliers by extending payment terms. We believe aggressive manipulation of payment terms to be one of the worst things you can do. Your whole supply chain is suffering similar pressures and potentially pushing your suppliers to the wall has both short-term and long-term repercussions. Even if you both survive, your reputation may take a hammering.

This is not to say that payment terms are not a valid lever to explore. Organisations with strong balance sheets can survive much longer than others and may also have a greater ability to borrow money at lower costs. Supply chain finance (where a bank or other financial institution allows both parties in a transaction to take advantage of the lower financing costs of the two) is a very useful solution to explore in this respect.

We are at least fortunate that interest rates are at historic lows in much of the world. While this is liable to change over time, it may still be possible to take advantage of low-cost borrowing. Several governments are pumping liquidity into the system themselves to support this.

The most important aspect of working capital to get right in such turbulent times, however, is inventory. Having too much cash tied up in inventory when demand crashes can be fatal to your organisation's survival, while shortages risk haemorrhaging sales, market share and customer good will. Inventory optimization – in its true sense, not as a euphemism for inventory reduction – is never more valuable than in such uncertain times. The closer you can match supply to demand the better.

Some early commentary on Covid-19, when the main supply chain impact was on the supply side, particularly from China, suggested that lean, just-in-time inventories were to blame, implying that greater safety stocks were a suitable buffer to protect organisations against such major disruption. Avoid this way of thinking. Apart from tying up unnecessary capital in inventory, it will exacerbate bullwhips throughout your supply chain. It is right and judicious to raise inventory reserves for some items where demand is certain and supply at risk, but this is not the same as building buffers across all items. Companies applying inventory optimization techniques will find that they reduce shortages even as they reduce excesses.

So how does one optimize inventories in such volatile times? Inventory optimization is technically challenging at the best of times, so what hope is there at the moment? Well surprisingly, you might actually find opportunities to take advantage of the current crisis to achieve things that are normally more difficult.

- Start with a thorough assessment of **criticality**. Not criticality to your own business so much as criticality to the world at large. Suppliers of personal protective equipment (PPE), critical medicines and food, for instance, all of which are essential to life, would be fully justified in building inventories if necessary to guarantee supply on demand.
- Make every effort to maximise **transparency**. Use all of the sources of internal and external data you can and reduce time lags for sales and inventory data to filter through. Maintain regular lines of communication with your critical suppliers and stay on top of macro-reports for relevant commodity, manufacturing, logistics and sales markets.
- Make greater use of the other great supply chain buffer which is **time**. In normal times, sales and marketing priorities often dominate. Indeed, supply chain professionals spend a fair percentage of their time wondering why customers have been promised a lead time of a few days for products which take months to source and produce. But in the current climate, expectations for non-critical items are reduced. Look at how long e-commerce delivery times have become in the last few weeks. Once you accept that some clients will have to wait for some items, service levels can be relaxed and variability dealt with using waiting

times, not piles of inventory. (This will of course depend on circumstances. If you are sitting on piles of cash and in a market where your competitors can deliver without delay, you will follow a different strategy.)

- Related to the previous item is **prioritisation**. It may be strategically necessary to increase inventories for some items to protect sales, but there is likely to be only a small percentage of items where this is truly necessary. Other items can work with much lower service levels or even be temporarily discontinued. This is an environment where multiple variants can be jettisoned in favour of a smaller number of options. Ensure that your top revenue-generating items are prioritised and relax provisions for non-strategic ones.
- Be wary of **forecasts**. Some forecasting enthusiasts are already out in force, trumpeting how poor historical demand now is to predict future demand. This may or may not be the case for you. However, in such extraordinary circumstances it is far from obvious that any other method of forecasting will be superior. Based on the past few weeks, you may already have a sense of whether demand is up, down or more or less steady. This may or may not continue. Rather than reaching for your crystal ball, however, you would be well advised to try and match supply to demand as closely as possible. Now of all times you should rely on actual sales to drive your plans, not on forecasts. You will need to factor in back orders or lost sales as well as known upcoming changes in demand, but nevertheless use the empirical data. Focus on shortening lead times and maximising agility.
- Where you are faced with shortages, develop fair **allocation** methods. If you are giving your customers all or nothing, you are exacerbating the bullwhip in your own supply chain. Try to maximise visibility and devise a methodology where you smooth available supply in as equitable a fashion as possible. This applies to internal supply chains as much as external. Shorten production runs where necessary to better match supply to demand.
- Also be protective of the third great supply chain buffer: **capacity**. Your ability to match supply to demand as closely as possible will be heavily determined by your ability to change production schedules at short notice on an ongoing basis. Especially if you are facing shortages, it may seem tempting to produce large batches, but this is liable to create further bullwhips and imbalances in your stock position. Try to maintain some gaps and flex in your production schedules to allow for last-minute changes.

In the short term, things are liable to remain fluid. Things can change rapidly. Look out also for knock-on effects as unemployment and bankruptcies increase and production facilities are shut due to disease or preventative measures.

How you brace your supply chain may well determine whether and how well you survive the Covid-19 outbreak. The short-term response is critical to this. But do not lose sight of the longer term either. The crisis will pass, and when it does you will need to be ready for that too. We will consider the medium-term response in our next white paper, “Back to normal”.

nVentic is a specialist supply chain consulting company with advanced analytical capabilities and a particular focus on inventory optimization.