Coronavirus COVID 19
More guidance for procurement and supply chain managers

A knowledge paper and practical guidance on what managers could do to mitigate the impact of this risk on their supply chains

CIPS members can record one CPD hour
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Introduction

An impending coronavirus pandemic is a prime example of how the whole world has been caught out. Efforts to contain the virus are ramping up, and now maintaining the flow of goods and services in global supply chains feels like dealing with a leaky bucket - where one issue is resolved, another appears.

The globalisation and integration of supply chains, ‘just in time’ strategies, minimum stock levels and volume discounts achieved through sole sourcing strategies have given positive results for manufacturers and retailers. But, the increased number of parts and complexities in the chain also opens organisations up to situations like these.

Supply chain managers will have to act very quickly now to build stocks where they can of essential components, or seek alternative sources of supply to minimise further impact on their operations, as the shortages caused by the shutdown of China’s factories feeds through the supply chain. This is happening in other regions of the world too, for example Northern Italy, in what seems to be a very short space of time. For some businesses it appears it is already too late to put those mitigation strategies in place as empty supermarket shelves and shortages on production lines have started to appear. With consumers stockpiling essential items, this is likely to exacerbate the efficient flow of supply chains.

Best practice in procurement and supply chain management dictates there are always choices to be made when minimising risk. For instance, opting for minimum working capital in sectors such as automotive and retail means events such as this, have a greater impact on supply chain continuity. Stocks are drying up and suppliers are unable to fulfil contractual obligations as factories close and workforces stay away. It is the responsibility of the supply chain manager to build in sufficient resilience through multi/dual-sourcing or invest in the development of new supply markets to deliver best value for their customers. It seems some companies were caught out and as consumers are spooked and start large scale stockpiling, the number of shortages will escalate.

This black swan event is now beginning to seriously de-rail supply chains and affect business productivity in addition to the cost in human lives. Keeping fingers crossed and hoping for the best will not do and pandemic planning is now in place for countries and businesses. We must all remain vigilant to reduce the effects of the pandemic through risk mitigation, strong sourcing strategies, a review of demand planning and forecasting, with the speed and agility that is expected of professional procurement and supply management.

What we know now

At the time of writing, a month after news of the virus broke, reports of China returning to 60% capacity are premature. With workers staying away and a lag in logistics efficiencies, containers are stuck at ports and airports, and many months of recovery lie ahead.

We know:

- Over a 100,000 confirmed cases worldwide – and continuing to rise
- Over 70 countries and regions affected
- 2% mortality rate is lower than Ebola (50%), Mers (34%) and Sars (10%)
- 9x more infections than Sars

Automotive and retail supply chains were affected early in the cycle of the COVID-19 Coronavirus in China, with telecoms following close behind. Procurement teams have become so confident about the reliability,
cost and quality out of China that they have become dependent on single-sourcing and have been caught out. The interwoven nature of modern supply chains means it is almost impossible to say for certain just how reliant we are on China for manufacturing and assembly. For manufacturers there are likely to be few realistic alternatives if the virus continues to spread, as infrastructure, set up and cost in new locations could be prohibitive. For example, 50% of all manufacturing in the Wuhan region is related to automotive and 25% to technology supplies.

Shocks to global supply chains like this do happen in the form of volcanos and tsunamis. But this may be a turning point for global sourcing. Re-enforced by mitigation strategies as a result of climate change, this could unseat China as one of the largest manufacturers of components and pharmaceuticals, as supply chain managers look to more local sourcing in the future. To put this in context, Apple has 290 of its 800 suppliers based in China, so companies like this could take years to switch away from their current suppliers.

It’s not only China suppliers that are causing issues with supply chains. The recent outbreak in Northern Italy is causing real concern to sectors such as automotive and aerospace, who rely on this region for engineering components and assemblies, and finished products. There are likely to be even fewer buffer stocks available for supplies from Italy due to more reliable manufacturing outputs and easier logistics routes. The impact will be felt more keenly by the companies exposed to this region.

Airlines are reducing cargo operations and air freight has reduced by 50% according to Professor Wilding from Cranfield University. Some countries are closing their borders or applying travel restrictions (the new ‘silk road’ is currently affected), which means that many will need to find alternative routes, which will get crowded as time goes by. Disruptions will also become more and more visible as soon as the buffers within the tiers of the supply networks start shrinking, and as more countries are significantly affected by the virus.

Within retail, demand for goods vary during and after a crisis – demand for staples such as food and baby care products will increase because of panic buying as well as a steeper demand for anti-bacterial products and hand sanitisers. In addition we are likely to see a ‘dip and rebound’ pattern for clothes and cosmetics with the sudden release of backlog, demand is likely.

As businesses look away from cheap labour and materials because of the distance and vulnerability in supply chains, they may find that local sourcing starts to become more cost effective, taking into account the total costs of the supply chain.

**Practical steps**

- Prioritise your high risk supply sources not just by geography, but by sector/commodity/value to the business
- Analyse your supply chain beyond your tier one suppliers to fully understand your exposure to the affected countries and regions
- Don’t rely on forecasted supply data or current inventory levels
- Calculate your stock tolerance over the predicted “at risk” period to determine your pinch points
- Keep communication channels open with your key suppliers.
- Continue to seek out alternative sources of supply as well as alternative transportation routes
- Re-assess travel plans and use digital technology such as teleconferencing instead of face-to-face meetings
In the long-term

- Carry out lessons learned debriefings to highlight critical areas of supply that could cause a problem in the future and build in mitigation plans
- Look to forge alliances with organisations in your sector to develop new markets of supply where there are a limited number of suppliers or suppliers are limited by geography
- Spread your sourcing across multiple suppliers in different geographies
- Look to develop more local sources of supply.

Review your supplier base

A sudden change in supplier(s) can have a critical effect on your business, so an honest look at which suppliers are essential and specialist to your organisation is now an urgent requirement. This applies to all levels, or tiers, of your supply chain and it is really important that a detailed analysis is conducted and a full risk assessment is carried out. In this fast-changing situation it isn’t clear where the next major outbreak will take place and we need to be prepared for every eventuality. Scientists predict we may see another pandemic in a few short years.

As conferences are cancelled or large gatherings banned by governments for public safety reasons, finding new suppliers in this traditional way may become more difficult. Many online supplier databases, directories and marketplaces exist, and the majority pre-qualify suppliers for you, so this could be a good way of identifying potential new sources. In the short-term buyers could look to use established marketplaces for spot purchases.

Warehouse & Inventory Management

Not everyone has the luxury of managing large volumes of stock from either a warehousing or working capital perspective. In fact, in recent times there has been drive to reduce stocks and rely on more efficient and lean supply chains. This has decreased the amount of warehouse space that companies have, with many converting them to be used for manufacturing production instead. With global trades waxing and waning due to trade disputes or socio-political issues, companies need to review their approach to inventory to protect their business from these shock waves and ensure they can provide a seamless flow of goods to their customers.

There are pros and cons to building more inventory, consideration can be placed around building inventory within a company’s own stores to avoid bottlenecks at the port when supply chains start to work normally again, so giving access to parts when required in order to minimise disruption or potential down time to production lines.

There may be significant cost associated with increases of inventory. This could be driven by a need for additional storage facilities or tighter stock rotation and management, leading to the cost of additional resources required to support this activity. We saw an example of this with the recent stockpiling caused by the potential no-deal Brexit situation in Europe, where warehouse space was in short supply and became very expensive, particularly for chilled products.

This may mean a revision to working capital budgets and a review of expectations for free cash flow from businesses in the future. You need to work closely with your finance colleagues to understand the impact and secure agreements to make the necessary changes.
Import & Export

Businesses must factor in increased transit times to alternative ports unaffected by the virus or away from ports which are closed as a result of human containment preventing smooth logistics and transport. Air freight is down at the time of writing, due to the reduction in production in China, but it could be a better option for companies who are used to shipping, although clearly it is a more expensive option. When looking to quickly replenish supply chains to get production lines moving or put essential goods on supermarket shelves the additional freight costs are definitely worth the investment.

Additional issues that need to be planned for if there is congestion ports include:-
- Haulage capacity, drivers and lorries being locked in queues at ports, or a lack of delivery drivers available
- Increased unaccompanied trade. Hauliers may be unwilling to be caught in queues and logjams. As a result there may be an increase in goods which are taken to the port of exit and left to be loaded onto trains and ships by tractors and then left at the port of entry for pickup. This will increase congestion at ports round the world, exacerbate the shortage of haulage capacity problem and increase your demurrage costs.

Many businesses have built complex global supply chains, so supply chain managers should be prepared for longer lead times which could affect service levels and margins especially for goods with a short shelf life. Perishable goods may have to be dumped.

The key issue for many organisations is having the capacity and capability to make speedy decisions when crises like these occur. Questions to ask your senior management team and your stakeholders include:
- What approvals do you need to obtain to get your goods through customs as quickly as possible?
- What are the additional costs to your business and can your company absorb them eg. non-delivery of contracted goods/services?
- Will there be additional costs incurred for new suppliers or delayed goods?

Will businesses be expected to pay penalties for late delivery or lose contracts and delayed payments for delayed goods which puts cash flow for business under pressure. The knock-on effects of this would have an impact on the global economy.

Legal issues

If a firm has been impacted by an event outside its control, contract laws in many countries include force majeure provisions which will help them to avoid liability. If a Chinese supplier has a factory in Wuhan that has been closed due to instructions from the Chinese government because of the virus, that could well be a force majeure. Coronavirus and government action is not in the control of the supplier nor could it be anticipated.

However firms must be in constant communication with their suppliers and show they are doing all they can to make good of a bad situation.

Force majeure may not be applicable in fixed-term contracts and certainly not in new contracts as at the time of writing the virus and its impacts have been documented for around nine weeks.
Alternative sources of supply
Look to potentially develop more local sources of supply if that is possible given your business model. Not only will you have more visibility of your full supply chain but there could be extra benefits such as reducing ethical sourcing risks, improved sustainability impact and boosting the local economies.

This is not a short term option for many organisations due to the normal approval processes and quality checks that need to take place before any new source of supply can be introduced. Also, as a new customer to a supplier it is possible that you will be at the back of a long queue for the supplier’s manufacturing capacity as they satisfy existing orders first.

Conclusion
Forward planning is critical to weathering supply chain risks and it’s essential that businesses fully assess the potential risks to their business and make sure they have mitigation strategies in place. Procurement and supply professionals have a vital role to play in both alerting their business to potential supply chain disruptions, and more importantly offering solutions to the problems.

In the face of a major global crisis such as the spread of coronavirus, now is the time to step forward and be proactive in protecting your business as much as possible from the impact. Keep yourself fully informed by keeping a close watch on Government warnings and advice and monitor supply chain data such as The Purchasing Managers’ Indices. Those businesses that are agile and react quickly will gain a competitive advantage and help prevent a catastrophe already experienced by some businesses as production closes and failed shipments of essential goods litter ports around the world.

Coronavirus COVID-19 could trigger a global economic slowdown, or it could burn itself out by the summer. The flow of goods could return at high speed to make up for lost time and create other bottlenecks. These trains of thought make it hard for businesses to plan with complete certainty, but supply chain managers must take some action now and continue to react appropriately as the situation develops.

More sources of information
https://www.cips.org/knowledge/procurement-topics-and-skills/coronavirus/
https://www.cips.org/knowledge/procurement-topics-and-skills/#39741
https://hbr.org/2020/03/coronavirus-is-proving-that-we-need-more-resilient-supply-chains