The World Health Organization (WHO) has declared the COVID-19 outbreak a pandemic and a public health emergency of international concern. Due to the interconnectedness and complex nature of global supply chains, the pandemic is expected to cause widespread disruption at a human, social and economic level.

At present, it remains unknown how widely the pandemic would spread and by when it would be brought under control. What is certain is that the widespread supply chain disruption will be felt in India and across multiple sectors.

Many businesses have a small window of opportunity to plan for the situation ahead. While a few weeks’ worth of supply of goods – enough to provide a short-term buffer – were already in transit when the outbreak spiralled out of control, businesses would need to prepare themselves for a long-term impact of the disruption.

What can businesses do to protect themselves?

Prepare

Identify critical products and suppliers: It is difficult for most organisations to identify every tier 2, 3 and 4 supplier quickly if they do not already have a transparent view of their third-party estate or at least the available data on them. Focusing on the most critical products and tier 1 suppliers, should help organisations to prioritise and expose key vulnerabilities. Once identified, organisations should assess how reliant these suppliers are in the regions affected.

Carry out risk modelling: The interconnected and global nature of supply chains means that disruptions in any region will have an impact on the supply chain of businesses located far away. Likewise, businesses around the world are feeling the impact of volatility on the prices of raw materials and products. Even if macro factors are stable, disruptions in the businesses of individual suppliers can cause a disruption in the whole supply chain. Therefore, it is imperative to conduct risk modelling covering regions, commodities and suppliers so that the impact of disruption on any of these variables can be assessed.

Analytics-driven scenario analysis: A pandemic like the COVID-19 outbreak brings specific challenges around the restriction of movement of people and the impact on productivity. There are wider implications; over time consumers might change their behaviour, placing extra pressure on logistics networks. Careful planning, as well as respect for the unpredictability of such an event, will help businesses see through the coming months.

To simulate scenarios that enable sound decision making incorporating the complexity of a business, it is necessary to use intelligent analytics that can allow complex permutations and combinations to be factored in.
That can be done best using automated, parameter-driven tool-based approaches to simulate a multitude of scenarios for assessing and quantifying the value at risk for the enterprise across the entire supply chain. The scenarios created should simulate both supply and demand side shocks and disruptions for the enterprise.

**Contingency planning:** What are the options to re-address the balance of supply and demand? Can production be scaled back or amended to protect scarce stock? Is buffer stock or safe alternative suppliers available? What is the impact on medium-term strategy? For example, the seasonal nature of stock owned by many retailers may require organisations to rethink on markdown strategy and inventory control over the coming months.

**Consider the financial and legal implications:** What will be the impact of supply chain disruption on margins, cash flow, loan repayments and terms? Are there legal implications for organisations if they are unable to supply to customers?

**Strategise:** Supply chain disruption brings the risk of unintended reputational damage. A clear strategy for transparent communication with customers, external stakeholders and employees, as well as along the supply chain, will be critical and can become a competitive advantage in crisis situations.

**Respond**

**Crisis management office:** Does the organisation have a central team that gets data and information from all its functions to convert them into meaningful insights for decision making? Accurate and timely data are needed to enable sound decision making. Data points based on risk models prepared and the impact of strategic and tactical responses need to be measured so that the response can be appropriately calibrated.

**Cross-functional crisis response team:** Tiding over a crisis requires supply chains to work in tandem with all relevant internal stakeholders. Inputs of all relevant stakeholders involved in supplying, manufacturing, logistics and warehousing are needed for a comprehensive response which can be cohesively implanted in a timely manner. Response to crisis situations could be strategic, involving evaluation of alternative sources of supply, substitutes, prioritisation of products, etc., or operational, involving changes in product mix, inventory management, etc. Any response to a crisis would need a cross-functional team input and buy-in.

**Crisis communication:** The speed and accuracy of communication with internal and external stakeholders can determine whether an organisation collapses under a crisis or tides over it. Systems that can provide instant triggers, dashboards that provide comprehensive status of supply chains and alerts that can indicate the course of action to be taken by all internal and external stakeholders are crucial for the business continuity of organisations during a crisis.

**Emerge stronger**

**Learn:** Data capturing during a crisis and decision-making based on empirical data provides a basis for learning and measuring the impact of response to a crisis. The lessons learnt can be valuable for organisations and enable them to build a more resilient supply chain capable of withstanding disruptions. During a crisis, organisations should try to:
- evaluate opportunities to learn from the disruption and implement the learnings to counter such disruption in the future
- turn adversities into opportunities by defining a resilient supply chain and drawing up a comeback plan
- identify key costs related to takeout, variable manpower models, etc.

**Plan and implement:** It is vital that concrete action plans are drawn up to improve upon the organisational weaknesses identified during a crisis and implemented to prevent the organisation from falling into a similar situation while dealing with another crisis. Organisations could use the learnings gathered from the ongoing crisis to form a task force to transform their supply chains.

**Track and measure:** Whether an organisation emerges stronger from a crisis or continues with erstwhile methods of operations depends on whether the operational changes are planned, measured and tracked methodically. Empirical indicators of an organisation’s performance will allow it to measure the benefits of implementing action plans and create more value for the organisation, its suppliers, customers and employees.

The COVID-19 outbreak may force us to reimagine the current model of supply chains. It may present us with opportunities to create more resilient, better-connected and more efficient supply chains.