



## The mandate of supply chain resilience

By Jim Tompkins

The COVID-19 pandemic revealed weaknesses in traditional supply chain models. In addition to causing production and shipping delays, manufacturers and retailers suffered inventory shortages and overages when consumers began stockpiling items such as toilet paper and flour.

While we can't predict or prevent crises or disruptions, we can minimize the impact by building resilience into supply chains. Here are five reasons why this is necessary amid uncertainty:

**Most supply chains are brittle.** COVID-19 exposed enormous gaps in real-time data, processes and systems. The outbreak of the virus in Wuhan essentially closed the “factory of the world.” For companies with products made in China, this meant a lack of supply and no inventory to sell. Others that relied on China for components were unable to keep their factories open. The just-in-time inventory philosophies that assumed a steady flow of goods were brought to their knees. It took over two months before China was able to resume shipping, during which COVID-19 was exported to every country. Then a variety of lockdowns and restrictions led to working from home, travel cancellations, the closing of non-essential businesses and schools, and huge growth in digital commerce. Supply and demand were out of sync and brittle; demand became unpredictable and massive inventory shortages and overages were common. The strategy of deploying efficient sup-

ply chains was broken and the need for resiliency became paramount.

**VUCA must be addressed.** In the late 1980s, the U.S. Army War College developed a leadership viewpoint to deal with the eventual fall of the Berlin Wall, the Soviet Union and the Cold War. It created VUCA – volatility, uncertainty, complexity and ambiguity –to help leaders understand how to respond to major disruptions. Certainly, 2020 was the greatest VUCA year of all time when, because of a lack of response, sup-

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ply chains spun out of control. It became clear by April that a new approach was needed to achieve resilience.

**Supply chains are about networks.** In today's supply chains, information typically flows from link to link where each link has a view of what happens in the link before and after it but no overall view of the network. Because supply chains exist across many partners, planning and execution must occur across multiple parties in real time to achieve maximum asset utilization, the lowest landed cost and the best customer service. A network platform that enables these capabilities while providing control tower-level visibility, collaboration, analytics, planning and execution is core to success.

**Supply chains are all about timing.** To deliver a single version of the

truth to all network partners, supply chains must eliminate information delays and provide real-time visibility. Eliminating delays allows for a change in demand at one end of the chain to quickly ripple across all of a company's suppliers and their suppliers. Real-time visibility of all orders, shipments and inventories allows you to sync demand with supply and increase service levels with less expediting and lower costs.

**Staff need to focus on higher value work.** Supply chain staff spend too much time performing routine tasks that should be handled by artificial intelligence and machine learning. The same tools can be used to increase staff efficiency by taking a control tower view and predicting

problems, using prescriptive analytics to address problems and suggesting, evaluating and ranking alternatives.

Supply chain resilience is no longer an option but a necessity with the level of VUCA and frequent disruptions. The key to success and resilience in tumultuous times is embracing reinvention and building agile supply chain solutions capable of rapidly adapting to address the current disruption, the next normal and beyond. ❖

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