
SUPPLY CHAIN RESILIENCY IN A PANDEMIC WORLD



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The COVID-19 pandemic has challenged supply chains like never before, but there are tactics and strategies companies can take to overcome its effects—and perhaps even emerge stronger. We explore them in this Insight Report.

Introduction

When merchant sailing ships became sturdy enough to support commerce over vast distances in the 18th century, they enabled the creation of what we know today as the supply chain. Rum was the first big driver of this new way of doing business: sugar cane molasses from the Caribbean was transported to New England, distilled into rum and bottled in Massachusetts, Rhode Island and New York, before being shipped across the Atlantic to thirsty European consumers.

Cotton was the next catalyst, spurred by technological innovations that helped dramatically increase output, such as the spinning jenny and cotton gin. Other industries followed suit in adopting a more dispersed approach to production and distribution as the Industrial Revolution truly took hold in the 19th century. Later, Henry Ford's system of automobile mass production defined the supply chain in the first half of the 20th century, while information technology began ushering in the modern supply chain in the 1980s. Today, the supply chain concept is ensconced in the very fabric of the global economy, affecting the production, distribution and sale of everything from frankfurters to Ferraris.

Throughout this long history, supply chains have had their share of upheavals. Natural disasters, wars, labour disputes and myriad other disruptions have routinely broken industries' fragile strings of links upon which a smoothly operating supply infrastructure is based. No calamity, however, has had as profound an effect on supply chains as the recent global pandemic resulting from coronavirus disease 2019 (COVID-19). Its suddenness, its extended reach to every corner of the globe and its profound economic and humanitarian devastation have made it a disaster like no other.

This Insight Report will examine the effects of COVID-19 on supply chains, how organizations can best deal with them (including a key focus on supplier relationship management strategies) and some of the lasting effects the pandemic might have on supply chains.

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COVID-19 and its effects on supply chains

Often referred to as “The World’s Busiest Airport,” Atlanta Hartsfield-Jackson International is usually a picture of crowds, bustle and noise. By April 2020, however, the busy hub had been transformed into something akin to a ghost town. Passenger traffic was a trickle of its former self, down 85 percent. Cleaning and maintenance crews had taken on skeleton status. Restaurants were shuttered and TV monitors flickered their all-news stations to mostly deserted waiting areas.

The stark scene was typical of not only airports around the world, but also hotels, restaurants, warehouses, factories and just about any kind of business setting that had been thriving only a few weeks earlier. The sudden changes were the result of the spread of coronavirus disease 2019, otherwise known as COVID-19, a disease caused by a previously unknown virus that was first detected in Wuhan, China in December 2019. As the virus spread to other parts of the world and the number of cases and deaths rose, with no known method to combat it available, citizens were advised to stay home and practice social distancing as much as possible.

The severe effects on businesses and the supply chains that underlie them were immediate. As demand for some products and materials dropped precipitously, inventory sat unmoving in warehouses and distribution centers. A corresponding rise in demand for other goods caused different problems, as factories and manufacturing plants with now-reduced capacities either could not create the desired output or could not ship what they had, due to transport networks being slowed to a crawl.

These extreme shifts in demand represent the biggest issue affecting supply chains during the pandemic, says Lora Cecere, founder of research and advisory firm Supply Chain Insights. “The whole hospitality industry has been totally sucker-punched. We don’t go to restaurants like we used to, but 40 percent of the food supply chain goes to restaurants.” Hotel bookings have plummeted, meaning companies that sell sheets and towels to them can’t sell enough, she adds. “You can’t get enough flour because people are baking at home. Every category now has very different demand patterns.”

Companies witnessed their seemingly sound supply chains begin to crumble within days. Some of their cash-strapped suppliers, for instance, went out of business, or those companies’ suppliers (tier 2) did. Any industry dependant on parts produced in foreign countries suddenly saw their supply lines run dry as shipping ground to a near halt. The automotive sector was but one example. With more people staying home, an unprecedented surge in consumer e-commerce further strained delivery networks.

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Tactics for tough times

Keeping supply chains running as normally as possible within such unprecedented circumstances represents the biggest challenge ever presented to most of the managers who oversee them. Fortunately, there are a number of tactics that they can take to ensure their products keep moving and the financial impacts to the companies they work for are minimized.

Know your suppliers

One of the first things a company can do to ensure the stability of their supply chain may seem obvious, but it's one that many outfits don't have a handle on—know who your suppliers are. Take the time to create a thorough list that goes deeper than just the tier-one suppliers you deal with directly, says Cathy Roberson, founder and lead analyst at Logistics Trends & Insights, a market research firm that specializes in global supply chains.

“Companies might know who their first-tier or even second-tier suppliers are, but once you get beyond that, you often don't know who the other suppliers are,” she says. “This (issue) showed up in a number of ways in the spring (of 2020). As automotive manufacturers reopened in the United States, they had a parts shortage because the parts were being stored in Mexico. Well, Mexico was pretty much shut down because of COVID. If you had that visibility in your supply chain previously, you would have known that.”

Completing as thorough a list as possible of their supplier network will help companies understand where potential weak points are—suppliers that are on the verge of going out of business and thus creating a gap in the supply chain. With the severity of the pandemic's economic effects, such occurrences are not rare. Engine manufacturer Briggs & Stratton, oilfield services provider Calfrac and trucking powerhouse Comcar Industries are but a few examples of companies either declaring bankruptcy, selling off major assets or shutting down completely.

“**Know who your suppliers are.**”

Having a supplier list in place will allow firms to put backup plans in place. If any critically weak suppliers are identified, managers can begin looking for alternates should their existing option suddenly disappear. Backup options are part of an effective supply chain risk management plan that is a necessity in good times and bad, says Roberson. “A lot of companies will treat that as a nice-to-have, but this year has shown that you absolutely need it.”

Set priorities

Once a full list of suppliers has been created, the next step for managing in the pandemic is to prioritize the most important of those on the list. This exercise should be based not so much on the volume driven by a supplier, but rather how critical they are to the health of your supply chain, says Lisa Anderson, founder and president of LMA Consulting Group Inc., a supply chain consultancy in Claremont, Calif. Identify what materials are absolute must-haves and who is providing them.

“Make sure that you are intimately familiar with their operations, how agile they are, how quickly they can ramp up with volume,” she says. “Understand their finances to the degree of knowing whether a large disruption will run them out of cash quickly.”

If time and resources permit, firms should even consider visiting with these critical suppliers’ own suppliers. It would be time better spent than investigating other tier-one entities that might not be as crucial to the immediate health of your supply chain.

Examine your typical workflows and shed any non-critical activities, Anderson further advises. “Stop doing things that were just nice to have and focus on what’s critical now. So stop doing reporting that’s not essential to managing your business during these times, for instance.”





Increase communication and collaboration

Knowledge, as they say, is power, and this idea is all the more true during times of crisis such as the current pandemic. Keep communication lines open with suppliers and be willing to alter pre-pandemic routines. Supplier check-ins that took place once a month should now be weekly affairs—perhaps even daily if the situation warrants. These don't need to be complicated, says Anderson. "For your main suppliers, get on a Zoom call and go through a set of metrics and see what's happening, even if it's only a 20-minute call."

With the ability to visit partner facilities lessened during COVID, companies should look to use today's readily available technologies to their advantage for communicating. This includes virtual walkthroughs of supplier warehouse floors or asking them to send videos of key facilities.

Collaboration has never been more important than now, and organizations should look to move beyond what that concept has traditionally meant to them. "In good times, it was more speak versus reality, but now, everyone is finally getting it. They are understanding why you should be collaborating," says Roberson. This could involve relaxing some previously rigid terms of typical supplier-manufacturer agreements. Extending payment periods and offering loans to finance inventory overages or shortages are two examples. Other ideas include sharing warehouse space if one party has extra capacity. These are the kinds of goodwill gestures that will help everyone get through the crisis.

Add expertise

With pandemic-related upheaval in the supply chain comes corresponding discord in the employment field, including that corner of it that involves supply chain professionals. Smart organizations with the financial means are hiring key people who are suddenly available into roles that they know are going to be needed in the future. In short, be on the lookout for good talent.

If hiring full-time employees is not an option, Anderson recommends bringing in a consultant with expertise in a crucial area, such as supplier management or sourcing, until an affected supply chain is stabilized. As with other facets of supply chain management during the pandemic, she adds, a laser focus on what's most important is crucial when it comes to talent addition. "Only do this with the things that could really put you out of business."

Post-pandemic success

Any attempts to forecast the long-term effects of the COVID-19 pandemic on supply chains are as dicey an undertaking as a TV weatherperson's prediction of rain or sun for the next day. As Cecere observes, "We are living in a supply chain case study without a predetermined outcome."

But most experts do expect to see a rise in "reshoring" in the years ahead: the movement of manufacturing processes and distribution channels back to domestic markets from distant locations such as China and India. It is also reasonable to expect a shift from the "just in time" supply chain model, characterized by low inventory levels and parts arriving within wafer-thin time windows to speed production and delivery processes, toward a "just in case" model, where larger inventories will be stored to hedge against any further crises—which will no doubt arise.

Regardless of what the supply chain of tomorrow will look like, Anderson offers one final piece of advice for firms to help set them up for success within it. "The smartest clients I'm seeing are innovating during these times....Not everybody has scaled back their operations. So why wouldn't you want to go to your supply base and say, 'What can we do together, what can we develop on the supply side, a product or a service, that would help?'"

Anderson harkens back to another disastrous upheaval that rocked the business world as a parallel.

"This is similar to the Great Depression, because the people who invested time, resources and talent at that time, and who were thinking of the future and not just bunkering down, came out of it wildly successful compared to their counterparts."

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About the Author

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About Intelex

Intelex Technologies, ULC is a global leader in environmental, health, safety and quality (EHSQ) management software. Since 1992 its scalable, web-based platform and applications have helped clients across all industries improve business performance, mitigate organization-wide risk, and ensure sustained compliance with internationally accepted standards (e.g., ISO 9001, ISO 14001, ISO 45001 and OHSAS 18001) and regulatory requirements. Virgin Atlantic, Brinks, Air Liquide, Lafarge, Volvo and over 1,300 customers in 150 countries trust Intelex to power their EHSQ initiatives. Intelex is one of North America's fastest-growing technology companies, recognized as a Great Place to Work for over 7 years, recipient of Waterstone's Most Admired Corporate Cultures award, and Deloitte's Best Managed Companies award. For more information, please visit www.intelex.com.