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Disruptions in Supply Chains and a Lesson from the COVID-19 Pandemic: A Retail Perspective

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he importance of supply chains has never seemed so vital before the age of COVID-19. We are now too familiar with emptying shelves of toilet paper along with severe shortages of face masks and hand sanitisers. Supply chains are what ensure our access to essentially every product and service necessary for daily life. We may imagine a supply chain to be limited to warehousing and transportation, but it incorporates the entire manufacturing process. However, our society has recently been facing the unique challenges of the COVID-19 viral outbreak, which has had negative impacts on business supply chains globally. We should not regard the pandemic as equal to natural disasters like floods or earthquakes because such catastrophes are limited in location. A flooding event on the opposite side of the country is not likely to severely impact us, except for some supply chain issues. On the other hand, a pandemic has no boundaries and is not restricted to a single region. The effort against COVID-19 calls for solidarity and cooperation between all governments, organisations and people worldwide.

How can a pandemic disrupt supply chains?

Disruptions rooted in pandemic conditions can manifest in several ways. A pandemic can trigger scarcity in the supply of labour and other resources. For instance, a factory can be forced to stop production because of having too many ill employees. This can also happen when no supplies are delivered due to national lockdowns and disruptions in global trade routes. Additionally, pandemic conditions can spark short-term surges of demand for specific products, such as masks and hand sanitisers. Basic grocery supplies can also be subject to peak demand when the public goes panic shopping. Then there is the phenomenon of the Bullwhip Effect, otherwise known as Forrester's Effect. This describes a situation where surges in demand tend to intensify conditions further up in the supply chain. A slight increase in consumer demand might trigger a massive escalation in production by manufacturers and suppliers. This results in the supply chain transporting a massively disproportionate stock, which does not reflect the natural changes in a product's demand and supply.

How to mitigate the disruption?

There is a political angle to any pandemic, similar to other disasters or crises. In these conditions, making a quick decision is more vital than deliberating on the most correct choice. Many countries have suffered due to delays and procrastination in taking immediate mitigation steps. Furthermore, recent events have highlighted our lack of investment into pandemic-related infrastructure for the public. These include digital infrastructure, laboratories and healthcare infrastructure, and distance learning technologies. This is one area where the business supply chain can fill a gap and offer valuable alternatives. A dangerous shortage of ventilator parts in Italy was alleviated by an organisation that supplied the needed equipment within 24 hours through 3D printing. This can inspire other firms to join the effort in manufacturing medical gear. Cosmetic companies including L'oréal and Coty took the initiative to repurpose their existing production equipment, usually reserved for perfumes and hair oils, to help manufacture hand sanitiser instead. These contributions offer alternative supplies for life-saving resources and ensure that employees have continued income and factories can continue operations even during a commercially challenging period for luxury products.

The various obstacles caused by the COVID-19 pandemic have highlighted many shortcomings within supply chain systems and call for stronger cooperation between global governments, aid organisations, academics, and industries to manage worldwide economic and health-related conditions. Managers across countries are advised to reassess their supply networks in the context of this pandemic and proceed to make changes that enhance the flexibility and vigour of their supply chains. Now is the time to ensure that our supply chains can still function as they have, but with greater resilience and better capacity to cope with risks that will surface in the future. We hope that the failures and challenges resulting from the current pandemic will better prepare us to face the next calamity as a global society.