# 5 Types of Supply Chain Disruptions – How They Could Be Affecting Your Organisation.

By Jane Leonhardt

There's nothing like global pandemic to put things into perspective. With the outbreak of the novel coronavirus, supply chains around the world have been disrupted. At the same time, they have been proven to be one of the most essential factors in society as we rely heavily on supply chains to deliver medical supplies, PPE, food, and the things that we need to live comfortably while staying healthy at home.

The pandemic has put supply chains around the world to the test. The <u>Institute for Supply Management</u> conducted a survey in which it collected information from 628 businesses. Nearly 75% of the surveyed businesses reported that they experienced disruptions in their supply chains as a direct result of the novel coronavirus (COVID-19). The survey also stated that 57% of the businesses reported waiting longer for their supplies to be delivered to them from their partners in China.

Supply chain disruptions can happen on any level – from the personnel that it takes to run things on the ground, to delivery fleets, and customer demand – it's nearly impossible to predict exactly where, when, and how supply chain disruption occurs. Unless, of course, you utilise <u>Supply Chain Modeling</u> and this scenario has been predicted and planned for.

Either way, it is crucial for leaders to understand how supply chain disruptions affect their organisation from top to bottom and what to do in the event that disruptions occur.

## What does supply chain disruption look like?

As the name suggests, a supply chain is made up of people, organisations, and activities that need to all work together in order to succeed. A supply chain's ultimate goal is to deliver a product from a supplier directly to a customer – much like a chain, it is only as strong as its weakest link.

Supply chains are organised like a pyramid: There is an original manufacturer at the top, suppliers in the middle, and distributers at the bottom. Although it is arranged in a hierarchal fashion for the purpose of this explanation, none are more important than the other. Without suppliers and distributers, manufacturers would have nothing to do with their products, and so on and so forth.

Supply chain disruptions occur when one or more of the aspects of a supply chain are impacted by a certain factor that causes their normal operations to change, halt, or slow down.

# What are possible supply chain disruption scenarios?

This is not an exhaustive list of the different types supply chain disruptions, but it should give you a pretty good idea of the scenarios that your organization might be up against.

Here are 5 different scenarios that could result in supply chain disruption:

#### 1. Pandemics

It has become apparent throughout 2020 how a pandemic can affect all areas of life and supply chains are certainly not exempt. When the world was told to stay at home, more people started ordering online. When society panicked about stores closing, the bought up all of the food and toilet paper they could find. When hospitals were overrun with COVID-19 patients, they needed more medical equipment and PPE delivered to them. All of this increased demand for goods (and in some areas, decreased demand) hit supply chains at every stage.

#### Natural disasters

When a natural disaster hits, supply chains can be affected from many different directions. If a manufacturing plant is physically affected, for example, that can send ramifications to all the corners of the world. Take the earthquake that hit Fukushima – it took offline supply chains that were responsible for producing 22% of all the world's 300-millimeter silicon wafers. Semiconductors around the world relied on this one product and felt the ramifications of a natural disaster thousands of miles away.

## 3. Transportation issues

If there delays at the transportation level of the supply chain, that may create loss of revenue, congestion, and dissatisfaction at the consumer level. Although these issues may be unforeseen and at no fault of the organisation, it's important to realise that this problem is very real and can occur at any time.

Transportation delays can certainly happen even when all is seemingly right with the world — there could be fleet management issues, broken contracts, or disruptions that occurred in another part of the supply chain that trickled down and finally affected transportation. In worst case scenarios, like the two mentioned previously, transportation may have to come to a halt altogether depending on local ordinances, the availability of personnel, or complications at countries' boarders.

## 4. Quality control

Unfortunately, even machines aren't perfect. Every now and again, something slips through the cracks and an organisation ends up producing a product that is less than ideal. If an entire batch is sent out to consumers across the globe, and damage control has to be done after returns are made, that can drive a wedge in the day-to-day operations, starting from the top and working all the way back down.

## 5. Security breaches

The infamous <u>2014 cyber-attack</u> on Target still lingers in the minds of many – especially those that were impacted. Hackers effectively stole the credentials of a Target partner and then stole data from 70 million customers as well as the information from 40 million credit and debit

cards. Any and all levels of a supply chain are at risk of a similar attack so taking every precaution and establishing a crisis management plan is crucial.

Even if an organisation thinks that their security measures will ward off hackers, it's never a bad idea to run tests and employ state-of-the-art security protocols. Improving transparency down the supply chain will help give organisations insight as to where their weaknesses lie and what they can do so make themselves impenetrable.

The best way to avoid supply chain disruptions is to expect the unexpected and have a continuity and crisis management plan. Well-developed plans for any of the above scenarios will minimize disruptions in your supply chain as well as ensure stability and longevity in your business.