

Industry White Paper

How to Protect Your Supply Chain & Mitigate Disruptions During a Time of Crisis



Executive Summary

Supply chains are mission-critical for businesses. <u>According</u> to research from <u>Deloitte</u>, 79% of organizations with superior supply chain capabilities achieve revenue growth that is significantly above average. These are the organizations with mature supply chains.

While it's easy to say that a supply chain needs to reach a certain level of maturity in order to improve revenue, in practice, that depends on the size and complexity of the supply chain itself. The geographic distances between the supply and demand, the volume of materials and type of products being transported, and customer expectations all affect how well it can be managed. Some businesses have achieved levels of maturity in their supply chains with the practices, metrics, and measurements they use.

However, a crisis can disrupt the entire supply chain and bring it tumbling down. Extreme weather conditions, war, cyberattacks, trade disputes, or pandemics can cause disruptions. In turn, these disruptions can create significant financial losses (62%), logistics issues (54%), and reputation hits (54%), according to the <u>BCI Supply Chain Resilience</u> <u>Report.</u>

For businesses that want to build resilient supply chains that can withstand disruptions, it's imperative to focus on specific tasks and bring the supply chain to a maturity level that will allow the organization to recover quickly.





How National & Global Crises Impact Supply Chains

Supply chains are typically designed and managed to operate in a repetitive manner, with all of the supply chain's elements aligned to ultimately deliver products to the end customer. Some businesses measure and manage risks to their supply chain operations, but some don't. However, even the businesses that do mitigate risks can experience disruptions that are so large that normal risk management can't address them.

Pandemics & Epidemics

As seen with the COVID-19 pandemic, nothing could really prepare any company for the kind of supply chain disruption that's been experienced. Nearly 75% of companies experienced some kind of supply chain disruption due to the pandemic in late February and early March 2020 alone – and 44% didn't have a plan to deal with a disruption on this scale, according to the Institute for Supply Management.

War & Military Conflicts

Civil wars and military conflicts across countries can disrupt supply chains significantly. Yet many supply chain professionals may place these <u>low on the risk of concerns</u>, even though the Korean peninsula, Taiwan, Mexico, and the South China Sea all show up as areas of <u>conflict to watch</u>.

Extreme Weather Events

Hurricanes, typhoons, and tornadoes can all cause disruptions. Even something as simple as a snowstorm can affect the supply chain and make it impossible to get products to the customer.

Logistics Issues

Labor issues, changes in regulations, or government shutdowns can also pose a significant risk to the supply chain. A worker strike could prevent trucks from being loaded, or new regulations could require disclosures or other measures before continuing to import certain goods.

Cyberattacks

The supply chain is surprisingly vulnerable to hacking and cyberattacks. From 2018 to 2019, there was a <u>50% increase</u> in <u>attacks</u>. Hackers continue to get creative with ways to steal information and launch denial of service and other disruptive attacks. The impact of one of these risk factors is felt across the supply chain.





The Importance of Supply Chain Maturity Assessments

When a large-scale crisis like a global pandemic occurs, the first thing that business leadership must do is to assess their current supply chain maturity. How well the supply chain is set up will dictate how recovery and mitigation can be handled. The capabilities in the supply chain typically are in line with the supply chain's maturity level.

There are five levels of supply chain maturity:

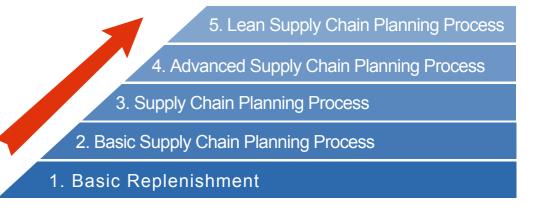
At the fifth and highest level of supply chain maturity, the organization has a lean supply chain focused on service optimization. Customers are being managed, trading partners are integrated, and the organization has its supply chain integrated with its overall planning process.

At the fourth level, maturity is more advanced than previous levels. The supply chain is managed end-to-end at A levels; an ERP system is being used, and the organization is starting to manage the supply chain at the customer level and focusing on how to improve the supply chain.

At the third level, there is an actual supply chain planning process with an ERP system in place. The organization is comanaging and has cross supply chain processes for Class A item levels. There is end-to-end visibility in the supply chain.

The second level of maturity shows the beginning of supply chain processes. Businesses are connecting what their customers need and what their suppliers provide, but it's typically only a partial connect. They're able to manage Class A items, like steel in the automotive industry, very well. However, secondary items are not being managed well. The organization is focused on production planning.

At the first and lowest level, businesses are able to get basic material replenishments. They're managing steps independently. Deciding what to buy from vendors is not integrated with transportation, logistics, or the overall planning process.



Answers to several simple questions can also diagnose the current maturity of the supply chain:

- Does the business currently have a Sales and Operations Planning process to adequately balance supply, demand and inventory?
- Does the business currently have a Supplier Contingency Plan if suppliers cannot remit orders?
- If the business is a manufacturer, does it currently have a Manufacturing Contingency Plan if some or all manufacturing sites cannot operate?
- Does the business anticipate disruptions of logistics and transportation services?
- Is the supply chain team adequately prepared and capable of managing the supply chain if working remotely?



How to Mitigate Disruptions

When supply chain disruptions occur, the first step in recovery is to contain them. Existing personnel resources of the business, its suppliers, and its logistics providers must be focused on identifying and mitigating the root causes of supply chain disruptions. They must identify and secure alternatives for sources of supply, logistics services, manufacturing capacity, and warehouse storage.

Additionally, the business may need to adopt a new daily rhythm for working meetings, status reporting, and discussions with supplier and logistics partners to ensure that all participants are operating with a heightened sense of urgency. Some of the basic things that can be done include optimizing inventory, focusing on the products and services that are of the highest value to customers, and implementing capabilities for employees to work remotely. Other examples of crisis strategies are:

<u>س</u>	Purchasing	Manufacturing
	 Mass balance, or being able to understand the status of everything that's been ordered. The Supplier Contingency Plan. A lot of times, organizations only have one source for goods and materials. In the event of a disruption, they can't get them and are left scrambling to build a contingency plan to order and find materials. It's important to be able to source locally or find a substitute elsewhere. 	 Capacity to recover. In some cases, it may be very difficult to get there due to government-ordered shutdowns. Organizations will need to have a plan for when shutdowns are repealed and they can begin manufacturing again so that they can flex their output levels upwards.
₽ ₽	Logistics	Business Units & Customers
	• Understanding the logistics capacity is critical. For example, during the COVID-19 outbreak, Chinese factories were able to begin shipping again to the U.S. However, businesses were being shut down by state and local governments, which could have led to full cargo ships that couldn't be unloaded.	 Organizations need end-to-end visibility into their supply chains to provide business units and customers with information. A control tower concept for centralized decision-making is also necessary. This will help organizations allocate resources and make sure that they're in line with what they're promising customers.



How to Mitigate Disruptions

Purchasing

- Mass balance: Status of open purchase orders
- Supplier contingency planning
- Impact of artificial demand
- Inventory target revisions
- Replenishment of consigned materials / VMI arrangements
- Logistics network capacity
- Warehouse limitations for surge shipments
- Lost shipping lanes

Distribution

Manufacturing

- · Capacity to recover
- Mass balance: Status of open sales orders
- Normal scheduling roles may not apply due to disruptions
- Maintenance planning and execution impacts

- End-to-end visibility
- Control tower for centralized decision-making
- Macro priorities versus micro priorities
- True consumption
 assessments
 - Risk assessment for each fulfillment model
- Order book revisions reschedule and re-promise

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Business Units & Customers





- Focus on products and services which customers judge to be high value
- Integrated, customer focused, supply chain processes
- Optimized inventory and fast response supply chain
- Capability to work remotely



Ultra Consultants supports its clients by performing an assessment of supply chain vulnerability. It assesses multiple dimensions of the supply chain, including at-risk supply flows and customer relationships affected by crises and ensuing disruptions.

Ultra Consultants creates a tactical action plan that can be deployed quickly. The action plan includes proposed metrics to diagnose vulnerabilities and their relative importance and level of risk. For each vulnerability, Ultra Consultants develops fact-based action items to recover the supply chain. Ultra Consultants offers staff augmentation to lead or participate in the effort.



Contact Us

Take a moment to explore how Ultra Consultants, as a trusted advisor with exclusive industry expertise can guide your organization to sustained business process improvement.





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