

### INTRODUCTION

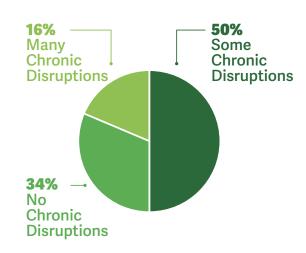
The COVID-19 Pandemic has had a major impact on supply chains across the globe. Among the various impacts, supply chain disruption is one of the most significant. Some of these disruptions may be acute, while others may in fact be more lasting or chronic. The Association for Supply Chain Management (ASCM), in collaboration with Elementum, collected data from 142 supply chain professionals in October 2020 to better understand the lasting or chronic disruptions that occurred within their supply chain operations as a result of the COVID-19 pandemic onset in March 2020.

# **CHRONIC DISRUPTIONS**

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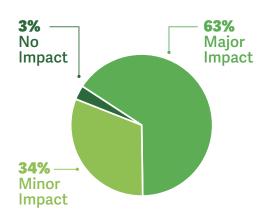
To what extent did your organization experience chronic disruptions prior to the COVID-19 outbreak?

By this we mean disruptions that occur regularly, are systematic and may become expected.



However, the data does in fact show that the COVID-19 pandemic increased the severity of supply chain chronic disruptions:

How has the COVID-19 outbreak had an impact on chronic disruptions your organization might face?



Different parts of the supply chain are being disrupted in different ways. The most significant impact on supply chains were stockouts due to excessive demand. A third of the respondents (31%) reported significant disruptions as a result of stockouts, and another third (34%) reported moderate disruptions. Excess inventory due to demand drop did not appear to have a significant impact. Roughly a little more than a third of the respondents were moderately impacted, and almost half the respondents had no disruptions related to excess inventory. Roughly half of respondents said there were moderate disruptions in all other categories listed below.

DISRUPTION	SIGNIFICANT DISRUPTION	MODERATE DISRUPTION	NO DISRUPTION
Production delays at impacted sites	22%	53%	25%
Material/component shortages	23%	54%	23%
Supplier issues	23%	60%	18%
Inbound logistics issues	16%	49%	35%
stock outs due to demand spikes	31%	34%	35%
Excess inventory due to demand drop	19%	35%	46%
Indirect material shortages	9%	46%	45%
Outbound logistics issues	17%	41%	42%

#### THE PATH TO RECOVERY

Few respondents (15%) have fully recovered from supply chain disruptions resulting from the COVID-19 pandemic. Most anticipate recovery within the next 9 months (47%) while others expect recovery in the range of 10 to 18 months (29%). Some (9%) organizations were impacted severely and do not expect to fully recover for 2 years or more. This would indicate that a vast majority (85%) organizations and industries across the board have experienced significant disruptions that will last 9 months or longer.

The path to recovery from the disruptions caused by the COVID-19 pandemic appeared to differ among various industries. Aerospace reported the longest anticipated recovery period, which is 2 years or more, with several companies within that industry indicating it would take more than 3 years to recover. This is not surprising, considering the pandemic's significant impact om the travel industry.

Pharmaceutical and healthcare industries are either fully recovered (24%) or expect recovery within the year (60%). Several industries were mixed in terms of their recovery. One third of consumer packaged goods firms reported a recover in 6 months or less, one third in the 7 to 18-month range, and the final third, 3 years or more. While the mixed results were similar for those in industrial manufacturing, more firms expected a full recovery in 6 months or less (around 60%) while the remainder in this industry looked to a 12-to-18-month recovery.

### PREPARING FOR A SIGNIFICANT RISK EVENT

The key to mitigating chronic disruptions is having a good supply chain risk management strategy. When asked to rank several risk aversion strategies, respondents Identified the two most critical strategies as real-time data/event monitoring for greater supply chain visibility and regular risk review and escalation. Sales and Operations Planning (S&OP) was the third most critical strategy to help mitigate risk, followed by monitoring key metrics.

Ranking of strategies used to mitigate risk

- 1. Real time data/event monitoring; supply chain visibility
- 2. Regular risk review and escalation
- 3. Sales and Operations Planning (S&OP)
- 4. Monitoring Key Metrics
- 5. 3rd party risk vendors
- 6. News media monitoring

Additionally, we asked respondents which strategies were implemented prior to COVID-19, after the initial pandemic hit planned for future implementation.

QUESTION	IMPLEMENTED PRE-COVID-19	IMPLEMENTED POST-COVID-19	NO PLANS TO IMPLEMENT	WANT TO IMPLEMENT / PLAN TO IMPLEMENT
Real time data / event monitoring: supply chain visibility	40%	14%	10%	35%
Regular risk review and escalation	44%	23%	6%	26%
S&OP	64%	7%	10%	18%
Monitoring Key Metrics	70%	14%	2%	14%
War Room / Incident Management	25%	40%	19%	16%
Control Tower	21%	21%	36%	23%
Planned scenarios responses and check lists	23%	27%	22%	27%
Stress Tests	15%	21%	41%	23%

The data shows that there appears to be a relationship between which risk mitigation strategies were implemented pre-COVID-19 and the level the magnitude of disruption. Organizations that had real time data monitoring, regular risk review/escalation or war room/incident management strategies implemented prior to COVID-19 reported less chronic disruptions to their supply chains.

## **Real Time Data Monitoring**

### Not implemented Pre-COVID

Major impact to chronic disruptions – 70%, Minor or no chronic disruptions, 30%

## Implemented Pre-COVID

Major impact to chronic disruptions 56%, Minor or no chronic disruptions, 43%

# **Regular Risk Review and Escalation**

### Not implemented Pre-COVID

Major impact to chronic disruptions – 69%, Minor or no chronic disruptions, 31%

# Implemented Pre-COVID

Major impact to chronic disruptions 60%, Minor or no chronic disruptions - 40%

# War Room/Incident Management

### Not implemented Pre-COVID

Major impact on chronic disruptions - 68%, Minor impact or no chronic disruptions, 32%

### Implemented Pre-COVID

Major impact on chronic disruptions – 52%, Minor impact or no chronic disruptions, 48%

The results show that good data systems, which are key in a digital supply chain and a good supply chain risk management plan, can help mitigate most disruptive forces to your supply chain. A war room approach and incident management also demonstrated some differences in the impact of chronic disruptions to organizations. The data showed that organizations with a war room or incident management system in place pre-COVID were more able to mitigate chronic disruptions as a result of the pandemic.

### CONCLUSION

The COVID-19 pandemic is likely the most disruptive supply chain event in the 21st century. Not only has it caused short term disruptions, but also lasting or chronic disruptions that persist at least 9 months after the onset of the pandemic. Depending on the industry, the path to recovery may be very long, while some industries and organizations have recovered or will soon recover. Even in the face of a major "black swan" event, there are strategies organizations can use to mitigate significant disruptions,

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Organizations today need to operate under the assumption that there will be major disruptions. It's no longer a question of if, it's now a question of when.

#### **ABOUT ASCM**

The Association for Supply Chain Management (ASCM) is the global leader in supply chain organizational transformation, innovation and leadership. As the largest nonprofit association for supply chain, ASCM is an unbiased partner, connecting companies around the world to the newest thought leadership on all aspects of supply chain. ASCM is built on a foundation of APICS certification and training spanning 60 years. Now, ASCM is driving innovation in the industry with new products, services and partnerships that enable companies to further optimize their supply chains, secure their competitive advantage and positively influence their bottom lines.

For more information, visit ascm.org.

