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What will be the "new normal" for global supply chains post Covid-19?

Supply chain management heeding the learning of the crisis



In the past six months, several headlines took attention on how global supply chains are affected as a result of the pandemic.

"Covid-19 puts Poland's logistics and transport groups to the test"—**Financial Times**

"Ocean carriers idle container ships in droves on falling trade demand. More than 10% of the global boxship fleet are anchored as western markets lock down against the coronavirus pandemic"—**Wall Street Journal**

"European ports hit hard by coronavirus lockdowns. Two-thirds of european ports report falling ship calls as pandemic triggers sharp

contraction in global supply chains"—Wall Street Journal

The pandemic revealed how interconnected and interdependent this world is. Restrictions on mobility halted travel, trade, supply chains, and further impacted economies. Looking at the vast ecosystem of any commodity's supply chain from its raw materials sourcing to production and to transportation to make it reachable to the consumers, it's a long journey. And hence the impact is vast. Going by the numbers, the World Trade Organization (WTO) estimates the global merchandise trade to reduce in a range of 13 and 32 per cent in 2020 due to the pandemic.



World Merchandise Trade Volume

Major challenges that uprooted in the supply chain ecosystem include:

- 1. Lockdown restrictions and closure of borders delayed/stopped raw material supply and contracted manufacturing everywhere (PMI indices dropped)
- 2. Transportation restrictions stretched delivery times (empty shipping containers piled up, sudden pressure on roads, rail and air cargo)
- 3. Consumer demand changed suddenly—focusing only on essential goods (also bulk buying further led to reduced trips to stores)

Key trends shaping the market include:

- 1. Increase in the number of freight trains:
 - According to the Ministry of Commerce of China, freight trains between China and Europe increased by 15 per cent to 1,941 and the number of containers transported by 18 per cent to 174,000 in the first quarter of 2020.
 - ii. UK rail freight launched dedicated services to deliver critical supplies (medical and food).
- 2. Sharp rise in e-commerce business:
 - Global e-commerce sales rose (ACI Worldwide, a global payment solution organization did a study utilizing global online retailers' transactions and found a (209 per cent growth) massive increase in April transaction compared to last year).

- ii. Contactless deliveries rise
- 3. Digitalization:
 - Belgian rail freight company Lineas optimized its operations by utilizing an online system named ETIS (Electronic Terminal Information System) that allowed customers to book freight transportation remotely.
- 4. Reshoring of manufacturing:
 - France and Germany have been taking joint measures to launch a European electric-car battery industry to offset Asian dominance in the sphere, with investments worth around €8.2 billion in the pipeline.



Few examples from around the world showcasing how the countries are embracing new trends:



Sysco Canada, a large Canadian supplier to the restaurant and hotel industries, launched an online grocery platform to sell products directly to household consumers



ArcBest, a logistics and trucking company in the US, utilized Microsoft Power BI to learn from dashboard that synthesized state/local COVID-19 case data with their service center locations and shipment metrics



Airlines during this crisis are moving cargo on passenger aircrafts using various schemes - by fastening boxes to seats with nets or removing economy class seats) Examples include Emirates Airline, Finnair (removing economy-class seats to operate cargo flights), and Air NZ

The pandemic, if anything, has forced everyone to change perspectives, and with supply chain disruptions, countries are now rethinking deeply about their supply chains and discussing on how to make them more robust. At the same time, it is an understanding that international trade is still imperative for the flow of goods. But the structure of the movement perhaps will need to be future-proofed to build agility and sustainability, underpinned by technology use. FROM PRE-COVID-19 CRISIS SUPPLY CHAINS

...TO A MORE RESILIENT PLANNING

Geographically long supply chains	Reshoring/Diversified supply chains
Largely Brick and mortar business (less online)	Retooling to online
Manual processes	Automated processes
Traditional logistics	Green logistics/Climate-friendly supply chain
Traditional linear supply chains	Circular supply chains
Less use of technology	Increased use of IoT, artificial intelligence, AR VR, robotics to enhance visibility and operations



COVID-19 is the Black Swan event we all learn about in risk and scenario planning. It's an event none of us expected to occur and has had an enormous impact on the global freight industry. It's exposed the vulnerabilities of many organizations, especially those who have a high dependence on international trade and global supply chains. The focus on supply chain optimization, inventory reduction, and maximizing asset utilization has left little ability to accommodate a Black Swan event like COVID-19.

In Canada we've seen major changes in consumer demand, labour shortages in critical sectors, as well as trade restrictions and protectionist measures introduced by our largest trading partners. This has had a major impact on our traditional supply chains. Many companies have been forced to pivot their business models as traditional retail channels have been weakened. This has created opportunities in how supply chains may operate in the future.

The pandemic has accelerated trends in supply chains such as e-commerce, automation, and reshoring manufacturing. To keep up with these trends it's important for freight planners and policy makers to understand the extended supply network and improve supply chain visibility. Enhanced visibility will allow businesses to activate alternate sources of supply, understand new risks and costs and focus on supply chain resilience.

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