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Coping with supply chain uncertainty post covid-19

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The COVID-19 pandemic has drawn significant attention to the importance of the supply chain management due to it being referred to a black swan event. This article seeks to address the uncertainties the world faces post Covid-19.

Before we proceed, there are many different definitions of the supply chain. For me, simply put supply chain refers to a system of organizations involved in moving a product or service from a supplier to a customer. It encompasses all activities involved in the production, transportation, and distribution of goods and services from raw materials to finished products.

Over the last four decades, the growth of global trade and commerce has led to increasingly complex and interconnected supply chains. Many supply chains have become more geographically dispersed, with companies sourcing materials and components from multiple suppliers around the world and outsourcing production to lower-cost countries. It is worth noting that different industries/sectors have very different supply chain systems depending on their products/services, processes, and customers.

Supply chain uncertainty and risk are two very different concepts. Supply chain risk research has been extensively conducted on supply chain and organizational management. Supply chain risk may refer to the potential for disruptions or impacts on the flows of goods, information and cash in the supply chain. We may forecast the risks in a supply chain. However, supply chain uncertainty refers to the risk and unpredictability associated with supply chain operations. It can not be measured or predicted. But managers must deal with the supply chain uncertainty post-COVID-19.

As the nature of our global supply chains has shown to increase the uncertainties which have led to production delays, inventory shortages, increased costs, and reduced customer satisfaction, and in extreme cases, supply chain uncertainty can lead to business failures. It is vital to take a proactive approach to managing supply chain disruptions. Based on one of my supply chain uncertainty research projects, I have suggested coping mechanisms for supply chain uncertainty in the post-COVID-19 world below.

Improving supply chain capabilities

The pandemic has highlighted the vulnerability of global supply chains to disruptions such as border closures, shipping bottlenecks, and labour shortages. As a result, there has been a renewed focus on building more resilient and agile supply chains that are better able to cope with supply chain uncertainty. Improving supply chain agility and resilience may help companies to manage supply chain uncertainties.

Supply chain uncertainties may cause both positive and negative impacts. Effective supply chain management involves developing strategies for managing uncertainty and mitigating its negative impacts. This may involve developing contingency plans for potential disruptions, increasing

supply chain agility to better monitor and respond quickly to changes, and collaborating with suppliers and customers to share information and reduce uncertainty.

Leveraging new digital technologies

One of the main causes of supply chain uncertainty is a lack of information. For example, in the past, the absence of satellites or computers to forecast the weather, and therefore difficult to know what the elements would be like tomorrow. Just as we can now predict future weather patterns, the same technological advancements can help managers to make decisions and reduce uncertainty.

This digitalisation has empowered companies to automate processes, increase digital connectivity, improve visibility and transparency, enhance collaboration, and make data-driven decisions to optimize their supply chain. It can help companies to reduce production costs, improve quality, increase agility and responsiveness, and enhance the customer experience. Examples of digitalisation in the supply chain include the use of sensors to track and monitor products in real time, the use of predictive analytics to forecast demand and optimize inventory levels, the use of robotics and automation to streamline manufacturing and warehouse operations, and the use of blockchain technology to create more secure and transparent supply chain networks.

Satisfying your employees

While digitisation is a key factor in supply chain management, human capital is still most valuable asset to any organisation. They play a crucial role in supply chain uncertainty management, as they are often the ones who are responsible for implementing changes and executing strategies in response to uncertainty and overwhelming the driving force behind a company's success. Investment's training and development opportunities, competitive compensation and benefits, and a positive work environment can help companies attract and retain top talent, increase productivity and innovation, and ultimately achieve long-term success. Moreover, when employees are satisfied with their jobs, they are more likely to be productive, engaged, and committed to their tasks. Such efforts benefit organisations when managing the uncertainty and complexity that often comes with supply chain management.

Optimising your business processes

Many supply chain uncertainties are embedded in their business processes. For example, inefficient and ineffective process design can cause many supply chain uncertainties, therefore evaluating and optimising your business process can reduce supply chain uncertainties. The optimizing processes involve streamlining supply chain operations to increase efficiency, reduce waste, and improve overall performance and which includes applying data and metrics to performance measure each process. These methods assist in pinpointing areas where performance is falling behind and allocating priority to enhancements.

An antidote is to develop a proactive strategy to improve each process through redesign, introducing new technologies, or retraining employees. It is suggested organisations continuously monitor and analyse one's processes to identify new areas for improvement and make changes as necessary.

Monitoring changes in the business environment

The macro environment is a source of many uncertainties. With the COVID-19 pandemic, improbability has become a major issue for supply chains due to disruptions in global trade, changes in customer demand patterns, and challenges in logistics and transportation.

As we enter a post-pandemic world, supply chain uncertainty has become the norm and with significant consequences for businesses. For example, the Russian invasion of Ukraine, the China–United States trade war, Brexit, natural disasters, extreme weather have all caused enormous supply chain disruptions and uncertainties. Managers must scan the periphery of their business environment for both internal and external factors. The key for success lies both in identifying and quickly responding to these changes to mitigate supply chain uncertainty in the future.

While the above might sound gloomy, the wheels of global trade and the role of supply chain management will continue to operate. Nonetheless, the key success factor in a post-Covid world will not be just to predict the next unforeseen event, but more importantly organization's ability to quickly recognise such and quickly pivot the focal firm to minimize the potential risk and capture opportunities.

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