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CONSULTING

2023
SUPPLY CHAIN TRENDS

Once viewed as a black box where unknown magic occurred, the area of supply chain has been revealed, dominating news headlines as current events highlighted product disruptions and material shortages to consumers more than ever before. Still navigating mass pandemic-related disruptions, companies today are looking to better insulate their supply chains from risk and uncertainty.

Currently, rising inflation and increasing fuel costs are placing further strain on organizations seeking to return to pre-pandemic service levels, margins, and inventory levels. As we look to 2023 and beyond, we predict a strong focus on the ways supply chains can continue to prepare for uncertainty and disruption while also supporting improved risk mitigation strategies, supportive technologies, and sustainable practices.

Below, we outline four supply chain trends to assist with these areas in 2023:

RESHORING AND RISK MANAGEMENT

NETWORK OPTIMIZATION AS A PRIORITY

SUSTAINABILITY AND GREEN SUPPLY CHAINS

CONTINUED TECHNOLOGY INVESTMENTS SUPPORT GROWTH OF ECOMMERCE

1 RESHORING AND RISK MANAGEMENT

After years of increasing globalization, COVID-19 brought to bear the fragility of a sprawling global supply chain. The disruptions have shown companies that the inability to predict risks will affect their supply chain. In turn, organizations have begun examining, revising, and establishing a comprehensive supply chain risk mitigation strategy by which to operate moving forward.

Shortening supply chains through reshoring or near-shoring has been one leading supply chain risk management abatement approach. Reshoring is best viewed as bringing key parts, products, or processes from the supply chain, be it suppliers or manufacturing, back to the home country. Some additional benefits of reshoring include reduced shipment costs, shorter lead-times, greater availability of higher skilled labor, increased oversite to quality control, higher responsiveness to customers, intellectual property control, and improved total cost ownership.

During 2022, 350,000 jobs were set to be re-shored, a rate not seen since 2010.
SOURCE

During 2022, nearly 350,000 jobs were expected to be re-shored, a rate not seen since 2010, and the projections for 2023 to 2026 don't show this trend declining. By 2025, reshoring could reduce shipments from Asia to the U.S. by 20% and by 40% by 2030. As such, the challenge today is focused on how to best prepare for the next request for restructuring, reshoring, or near-shoring the supply chain.

Restructuring a supply chain requires ensuring the supply chain is adequately mapped to include its high, medium, and minimal risk elements. These could be internal or external, such as a supplier's raw material. The objective is to estimate the amount of time it will take to get back to operations if there is a disruption.

Going forward, we expect near-shoring and reshoring to continue as organizations seek to mitigate the challenges of an increasingly complex global supply chain.

2 NETWORK OPTIMIZATION AS A PRIORITY

After almost three years of shortages, the pendulum has swung in the other direction with many organizations sitting on excess inventory. Couple this ample inventory with rising transportation costs, and it becomes apparent why organizations are turning to network optimization.

It has never been more critical to have the correct inventory in the correct, or at least close-to-correct, location. Optimizing your network can ensure that supply and demand of a given location are balanced, reduce transportation costs, and create a more agile supply chain. Of course, this isn't a simple problem to solve.

As such, organizations seek network optimization tools to help identify cost savings and improved service. The market for tools to successfully optimize the supply chain network has continued to grow. The supply chain management software market is currently worth $5.7 billion and expected to hit $11.3 billion by 2026.

For 2023, as companies examine network optimization toolsets, there are key areas which should be considered: First, the cleanliness and accuracy of the organization's data; and second, the current structure of its movement of goods, paying special attention to its inter- and intra- company supply chain ERP setup and design.

The value of a network optimization toolset is predicated on using many data elements. Therefore, it's advisable to conduct a supply chain data and process assessment before beginning such a project. This will assist in developing the next steps, along with the likeliness of success. No matter where you are in the process, it's vital that your organization has a defined roadmap and plan to execute against in 2023.

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SUSTAINABILITY AND GREEN SUPPLY CHAINS

Sustainable practices, coupled with the integration of environmentally responsible principles, are rising to the forefront of challenges that supply chain leaders face. According to the Environmental Protection Agency, roughly 90% of an organization's greenhouse gas emissions can be attributed to its supply chain.

Research conducted by MIT found that while pressure for sustainability from consumers has slowly increased, the most significant increase (23%) has been driven by investors. In response to growing pressures, the following considerations are provided to assist organizations with their sustainability and/or environmental improvements areas:

Greenhouse Emissions Management: Organizations can investigate technology to support the gathering of emission data, digital, and environmental solutions they're implementing to offset their carbon footprint.

Resource Accessibility: Supply chains experienced the impact of resource inaccessibility throughout COVID-19. For this reason, organizations are shifting their focus to the discipline of a more circular economy, referring to finding ways to get the most out of materials. This not only reduces CO_2 emissions but also increases the security of raw materials. The benefits of a circular economy gained so much notoriety in 2022 that the World Bank released its first report concerning it in December 2022.

Supply Chain Ecosystems: The ecosystem that makes up a supply chain requires organizations to improve their utilization of resources. A plan of how to increase their resilience becomes an important element in supporting a supply chain's sustainability and green initiatives.

Renewable Energy Sources: Evaluating a business's capability to control its energy sources in addition to its suppliers is an effective approach to begin the entry into sustainability.

Climate Change Disclosure: As seen by the European Corporate Sustainability Reporting Directive, more nations will require supply chains to report their emissions and energy consumption. As such, organizations should be aware of the need for transparency and reporting of their ESG goals or initiatives.

Logistic Providers: Logistics providers are also accelerating their efforts to reduce the carbon footprint of supply chains. This includes global innovations in ocean freight, as well as domestic U.S. goals and government incentives to dramatically increase use of zero-emissions vehicles.

With the sustainability spotlight on supply chains, we expect to see a growing interest in circular economies and the technology that supports them.

4 CONTINUED TECHNOLOGY INVESTMENTS SUPPORT GROWTH OF ECOMMERCE

Its's well-known that a late delivery can sour a consumer on a brand. Yet, with the rapid growth of eCommerce and consumers wanting real-time delivery information, most of today's supply chain and logistics managers have little visibility or operational control over the last-mile fulfillment.

The last mile, or stretch between the store or warehouse to the individual customer, is the most expensive and time-consuming part of fulfillment and has posed a unique challenge within the supply chain. With last-mile fulfillment, the ability to monitor real-time carrier information is lacking, which in turn leads to inaccurate delivery estimates. Furthermore, the capability to optimize or influence a route is next to impossible, as the last-mile carrier is responsible for establishing their own routes and schedules.

With the expansion of eCommerce, these fulfillment challenges are leading to an increased focus on how to improve the last-mile delivery experience. Artificial intelligence and machine learning are playing an increased role in solving this problem, as their ability to take in copious amounts of dynamic information and produce optimal solutions make them ideal tools to combat the last-mile challenge. Examples of machine learning in order fulfillment include technology for vehicle routing and product condition constraints.

As eCommerce continues to grow (along with consumer expectations), companies will need to invest in technology that improves the complicated last mile. Customers no longer want to wait for answers, instead they want more information, faster. Therefore, the question is: what are you doing to meet, exceed, and/or anticipate their changing requests?

The global autonomous last-mile delivery market size reached $15.2 billion in 2022 and is expected to reach $47.8 billion by 2028.

SOURCE

CONCLUSION

As organizations focus on customer satisfaction, along with profitability, the spotlight will remain on the supply chain. The importance of focusing on how to reduce the risks and costs while facing further complexity driven by sustainable and environmental requirements will be critical to the organization's future. To support these efforts, supply chains will require the use of technology such as network optimization and improved integrated end-to-end supply chain toolsets providing visibility to customer delivery performance. The times of the black box are now gone…it’s time for organizations to prioritize supply chain visibility and risk management and recognize the supply chain’s critical importance to their operations.

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