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???Wayne Akoka



For global supply chains, 2023 is going to be a case of déjà vu all over again.

Over the past few years, businesses ranging from retailers to consumer packaged goods companies have grappled with one supply chain disruption after another, many of them related to the Covid-19 pandemic. Unexpected shutdowns of factory floors and crucial ports in China exposed just how vulnerable global supply chains are and how little visibility businesses possess with their supply chains.

And yet businesses remain as vulnerable as ever. Consider:

- Business across the board, after experiencing product shortages in 2020 and 2021, now find themselves experiencing a surplus. Remember the global computer chip shortage? It's now a chip glut. Remember when retailers struggled to keep their shelves stocked with merchandise for the holiday shopping season? The opposite happened in 2022, as retailers heavily discounted products they had stockpiled.

- COVID-19 is far from over. In China, a surge of COVID-19 is once again threatening to disrupt global supply chains. China, home to some of the world's busiest ports, is crucial to fully functioning supply chains. The COVID-19 surge is expected to bring about short-term strains in the workforce and supply chains. (Recently, Shanghai's Tesla factory reportedly suspended production as the company faced a fresh wave of Covid cases within its Chinese workforce.)

Those dynamics underline why it's so important for enterprises to possess visibility into their supply chains. They need real-time data to identify the status of inventory everywhere across the entire supply chain. But too many companies continue to suffer because they lack data about what is on a ship transporting their materials. They need to know where their goods are at all times if they are going to successfully sense and respond to changes in demand and supply. This is especially true of complex supply chains that rely on many players operating globally. But a lack of transparency makes it nearly impossible for them to take steps such as identifying how to predict when inventories might return to normal.

Improved Visibility Delivers Multiple Benefits

Improved visibility goes beyond making supply chains more resilient. Having complete visibility into the supply chain from end to end also means:

- Everyone involved in the supply chain – from plant managers to store managers – having a common understanding of goals and real-time knowledge of when those goals are not being met. When everyone in the supply chain has access to the same data, they become aware of problems arising (e.g., performance goals are not being met) and can act sooner to identify where the source of the problem might be. For instance, a chronically out-of-stock product can threaten sales goals. When everyone in the supply chain has visibility into the problem, they can immediately focus on finding the source (or sources) of the issue. Are delivery trucks being slowed down? Are products being distributed to the wrong store? Is there an issue with demand forecasting? Or all of the above?

- Everyone collaborates on planning, including demand forecasting. Retailers and manufacturers need to be aligned with their forecasting expectations. But, too often, they are not. A few retailers and CPG firms are tackling this problem by using shared cloud-based platforms that make it possible to do collaborative planning. But those efforts are still in the early stages of taking hold.

Visibility Black Holes

Talking Logistics says that supply chains are littered with "black holes" that prevent companies from realizing the full benefits of visibility. Companies frequently develop point solutions that address specific supply chain problems but that don't always come together to provide an overall view of supply chains. With fragmented and dynamic supply chains and diverse software applications, the challenge is getting the information to roll up to the enterprise level, with analytics and optimization to help solve broader problems at the execution level.

As Vadhi Narasimhamurti from Deloitte said in a round-up of supply chain predictions for 2023, "Organizations continuously face the challenge of better leveraging the data they have to make informed decisions. While the volume and nature of data available to organizations has exploded in the recent years, the ability to translate that into meaningful, actionable, and real time insights is still lacking, both within the 4 walls of the enterprise and across the broader end-to-end value chain."

No Quick Fix – but AI Can Help

So, how do businesses achieve supply chain visibility? There is no easy answer or quick fix. Rather, limited visibility is an opportunity to transform the supply chain, as Clorox is doing. Artificial

intelligence (AI) is essential to achieving this transformation.

With real-time data, a business can identify the status of inventory across the entire supply chain. AI makes it possible for businesses to capture the detailed data at scale, which no human being can do. For instance, retailers can combine third-party shipping and weather data with consumer-generated data such as Google search trends to align supply more precisely with demand (always a moving target) at regional levels. They can weigh this information against their own first-party data on inventory levels and customer purchasing patterns. A supply chain crisis does not affect every region of the U.S. in equal measure. A shortage of rain-repellant clothing is going to have more of an impact on retailers in Seattle in the summer than it will retailers in Phoenix.

How Centific Can Help

Centific helps businesses improve their supply chains with AI through our Orbit solution. Orbit from Centific is an all-in-one end-to-end value chain platform that gives users the ability to gain total visibility across the organization, take actions, while simultaneously delivering financial value for your stakeholders. Leveraging a state-of-the-art AI engine to solve a wide range of problem from replenishment, logistics orchestration, and even P&L optimization, Orbit boosts your organization resiliency by reinforcing ability to adapt to disruptions, sense and respond to unanticipated changes in demand or supply without sacrificing cost or quality. It is composed of an integrated business platform module and can be further enhanced with the Centific Meerkat Forecasting AI Engine.

Orbit applies our experience helping companies solve thorny supply chain challenges. For instance, a global food and beverage company mis-forecasted production for several essential products as they did not get quality retail execution data on-time, as well as did not stay in sync with retailers' inventory numbers. As products are not available on shelf, market share was affected customers switched to other brands.

We provided a platform to integrate internal and external stakeholders for not only data sharing but also joint business planning with digital automation of workflows empowered by use of AI-driven tools, enables end-to-end planning, connecting headquarters, manufacturing plants, distributor, and retailers.

Results included:

- Enhance real time visibility of product along the production timeline and increase optimized full trucks by 15 percent.
- Savings cost of $500,000 annually from saving labor cost and reduce human error when making order between retailers and company.
- Accelerated lead time from manufacturing to shelf by 30 percent.

We help organizations make smarter decisions that account for constantly changing variables, such as shifts in consumer demand and disruptions to supply. To learn how we can help you, contact Centific.

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