

COVID-19 ALTERED THE SUPPLY CHAIN—DOES YOUR FORECASTING STRATEGY REFLECT THE NEW REALITY?

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Supply chain forecasting was never an easy process. Millions of dollars were lost each year due to inventory overstock and understock even before the Covid-19 pandemic.

Forecasting grows even more complex when you add a pandemic into the mix. Behavior and events unique to the past two years—like the 845% spike in demand for toilet paper in 2020—skew data stored in organizations' systems. Outliers like this mean that supply chain analysts can no longer rely solely on past usage trends to determine how much stock to purchase.

As the supply chain continues to evolve, you must identify new opportunities to remain competitive. Rather than ignoring data from the past two years, you can adjust your forecasting strategy by adopting new

technologies, integrating external data sources into your systems and building relationships with suppliers.

The Pandemic's Impact On Predictive Analytics

Stocking or sourcing the right amount of inventory is critical, as overstock ties up money in products that won't move as quickly and wastes valuable warehouse space. But at the same time, inventory understock frustrates customers and drives them to competitors.

This is one of many reasons why 65% of global enterprises increased analytics spending in 2020, with demand forecasting as a primary function. Using real-time data, past usage trends, statistical algorithms and machine learning, predictive analytics capabilities enable organizations to detect trends and make data-driven

decisions. These insights assist with functions beyond inventory planning—many organizations also use predictive analytics to identify new business opportunities and schedule equipment maintenance.

Trends in supply, demand and sales during the pandemic created extraneous data that clouds organizations' abilities to accurately forecast. For example, fluctuating demand for certain products forced companies to retool operations, with manufacturers of products from cars to sporting goods pivoting to producing personal protective equipment (PPE).

Additionally, global shortages of LED screens, chips and other technology components are still making it difficult for procurement specialists to secure products on time from their suppliers. And geopolitical factors have made

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procuring components even more competitive and challenging.

These are only a few examples of how the supply chain landscape has changed, but one thing remains the same: You can't predict future trends using only selective historical data. While some organizations overlook data from the past two years, this approach ignores a critical time in the global economy. Instead, you need to revisit your forecasting strategy.

Four Ways To Remain Competitive When The Supply Chain Shifts

Instead of brushing aside extraneous data points or, conversely, allowing them to cloud predictions, you need to rethink your supply chain forecasting strategy. By expanding your data net to capture more third-party data, leveraging real-time data and identifying new supplier opportunities, you can meet demand and make smarter business decisions.

- Expand your data set. Since internal data alone is no longer an accurate predictor of supply chain trends, many organizations are turning to external data sources to increase forecasting accuracy. For example, with consumer

behavior and demand data—such as what time of year shoppers are more likely to purchase a certain product—you can gain insights from an audience broader than just your own customers. Consider starting with intelligence from industry trade associations. This data is typically vetted and more reliable than free, third-party data. Credible free data does exist; it's just not always as timely and requires more scrutiny.

Additionally, one of the most efficient ways to gather external data is to partner with another organization in your network to exchange information. For example, consider teaming up with a manufacturer whose data can feed directly into your system—or better yet, into a blockchain your teams can access, which enables you to forecast the quantity of available supply more accurately.

- Lean on contract agreements. Many organizations that historically consulted with brokers to find supply chain partners are now building relationships directly with contracted partners.

As a potentially more reliable alternative, contract partners can eliminate stress about supply sources and fluctuating costs. Instead of waiting to possibly

receive components months after you need them—likely at an inflated cost—consider building direct relationships with contracted suppliers and establishing expectations upfront about service levels and pricing.

- Look for suppliers outside your traditional network. As supply chain conditions evolve, your supplier portfolio should expand. In Q1 2021, 36% of small businesses reported delays with domestic suppliers, so you should have a plan B for when a supplier can't ship a product on time. Don't overlook smaller, independently owned suppliers because they can help meet demand—potentially at a more competitive rate.

- Leverage technology that supports your data and analytics needs. You will be at a major disadvantage if your current systems can't integrate with third-party APIs, so make sure your tech stack is up to date and can support your growing data needs. Consider investing in technologies such as modern enterprise resource planning (ERP) software with analytics capabilities. Optimize your supply chain strategy by investing in software that can integrate with external data sources and real-time data. You can gather data in

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real time with sensor technology such as IoT stored in accessible blockchains, which enables you to track a product throughout its entire supply chain life cycle. When you integrate this information with your supply chain management

system, you can make data-driven predictions about lead times, automate stocking and schedule equipment maintenance.

The pandemic certainly altered the supply chain in many ways that

now require new technologies, new ways of thinking and, most importantly, a new approach to supply chain forecasting and predictive analytics—with data at its center.

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