HOW PREDICTIVE ANALYTICS CAN HELP SUPPLIERS OVERCOME FLUCTUATIONS IN DEMAND

Food service suppliers have been scrambling to keep pace with fluctuating demand in a supply chain that has been anything but predictable since 2020.

Total restaurant industry sales in the U.S. hit an all-time low of $30 billion in April 2020. Since then, sales have fluctuated in response to surges of COVID-19 cases, climbing up to $72 billion in August 2021. But with the delta variant stressing health systems, colder months on the horizon, and uncertainty about the future, suppliers need the right strategy and data to outpace swings in demand.

How Innovative Supply Chain Technology Can Empower Purchase Decisions

Traditional forecasting and procurement strategies are no longer enough to keep pace with today's unpredictable supply chain. Nearly half of supply chain leaders increased spending on innovative technologies in the past year and a half. Many enterprises turned to predictive analytics and business intelligence as part of an enterprise resource planning (ERP) software solution to stay ahead of ever-changing demand.

Analytics tools should pair real-time data with past usage trends through machine learning and statistical algorithms to detect trends. The result is more confident, data-backed decision-making that can help suppliers get ahead of an unpredictable supply chain.

In today's chaotic economic landscape, these tools also offer reassurance that supply will be adequate for varying levels of demand. What does that look like? Let's examine several timely use cases.

1. Problem: Demand for Different Supplies

Since March 2020, restaurant demand in certain areas has swayed between in-person dining and carry-out services. Many restaurants had to either adopt or ramp up carry-out capabilities to stay afloat, which also meant they needed the supplies to do so. But food service packaging like napkins, disposable silverware, and takeout containers became scarce, making it difficult for suppliers to acquire them.

Use case: Restaurants and suppliers that are thriving are the ones with the right supplies on hand at the right time, which is much easier when you drive purchase decisions with data. Predictive analytics enables you to match internal data, like sales history, with external data such as natural disasters, weather patterns, and even gas prices. Predictive analytics within ERP software allows you to improve your response time to the latest trends — and profit off them.

2. Problem: Restaurant Closures

More than 110,000 restaurants

MODERN RESTAURANT MANAGEMENT

![vai logo]

— even those that were in business for decades — have closed permanently due to COVID-19. For example, if six out of 25 restaurants a supplier works with shut down, the supplier would need to adjust the number of products they need to purchase. If the hypothetical six, now-closed restaurants' information is still in your database, it will skew your demand history and result in unreliable forecasting.

Use case:

Removing past customer information by hand is tedious and extremely difficult to do by hand. But with analytics software, you can seamlessly and digitally remove the information from your analysis, which will automatically clear it from your demand history. This enables you to make more effective and efficient purchase decisions, thus reducing the risks of over or understocking supplies.

3. Problem: Delayed Order Fulfillment

Suppliers are struggling to fulfill orders on time because of labor and supply shortages and other supply chain gaps. For example, a record-high number of container ships off the California coast are lined up, delayed, and full of supplies. Additionally, research from March 2021 found that 44 percent of small businesses experienced shortages in their supply chains. Failure to meet order deadlines can lead to reduced customer loyalty and late fines from buyers.

Use case: Pairing internal and external data enables you to make predictions based on past trends coupled with real-time data, unlocking two critical capabilities. The first involves the ability to make purchase decisions in advance. If you know a particular farmer or wholesaler you work with is not able to supply a product for another month, you can purchase a larger quantity of whichever items are backordered. The other capability involves predicting transportation vehicle delay times. If you cannot supply orders on time, you can at least inform your customers about the expected length of the delay.

Data-Driven Purchase Decisions Are Critical Moving Forward

The past year and a half have revealed vulnerabilities in the supply chain. Outdated forecasting and procurement methods are no match for the rapid swings in demand occurring in today's supply chain. The only viable solution to this issue is investing in solutions like predictive analytics and business intelligence as part of an ERP solution to stay ahead of fluctuations in demand.