




TOGETHER WE SOLVE

A TRANSFORMATIVE ERA FOR SUPPLY CHAIN MANAGEMENT

9 ways analytics empowers supply chain management to optimize response to COVID-19



The COVID-19 pandemic presents unprecedented challenges for supply chain. Many are scrambling to find short-term solutions for shortages and massive delays, plus avoid this risk in the future due to their reliance on a single source or location for production. Planners, buyers, and analysts are looking to speed up delivery of high-value insights to colleagues to respond to this emergency.

SELF-SERVICE ANALYTICS TO EMPOWER AND ACCELERATE RESPONSE + RECOVERY

1 MOVE INVENTORY

Within supply chain, planners, buyers, and analysts are working on redistributing current inventory away from quarantined areas or relocating safety stock to fulfill higher demands. By visualizing and understanding where cycle and safety stocks are available, an organization can successfully move available inventory away from quarantined areas to meet these increased demands.

ANALYTICS SOLUTION:

With Alteryx, you can easily analyze safety stock levels and reprioritize distribution based on demographics and population density. You can also leverage drivetime analysis and logistics details to move your inventory as well as understand freight costs and on-time delivery.

2 BUY AHEAD

Buyers are currently in a frenzy to buy raw materials ahead of time in order to prevent production interruptions or product stock outs. Buying raw materials that are in short supply in impacted areas is only possible when you can easily reshape your forecast to anticipate short-term needs and recovery times.

ANALYTICS SOLUTION:

Alteryx gives you the tools you need to analyze and visualize the cycle of your product including the bill of materials, as well as the network analysis of your transportation cycle. By analyzing these key components, you can create a priority list, matching sources with current capacity and delay constraints as well as organizing shipping to find warehouses that will hold additional raw materials.

3 RESHAPE DEMAND FORECAST

Planners and buyers need to reshape their previous demand forecasts. Today, they must consider tier two and tier three suppliers, raw material availability, as well as current running stock and safety stock levels. Reshaping demand forecasts provides insight into previous supply chain disruptions, as well potential short-term fulfillment.

ANALYTICS SOLUTION:

Alteryx can help you look for other black swan events such as previous recession data and emergency response disruptions to investigate and find key indicators for solutions. Once you have found key indicators, use them to train predictive demand forecast models. This will begin to give you a line of sight on what recovery may look like.

4 NEW PARTS & RAW MATERIAL SUBSTITUTIONS

Most manufacturers and supply chains have already pre-approved alternate parts or raw materials to create their products. Activating these new suppliers can take a fiscal quarter, as production needs to be modified to accommodate new materials or parts.

ANALYTICS SOLUTION:

With Alteryx, you can create a priority list, matching sources with current capacity and delay constraints to organize shipping and find warehouses to hold additional raw materials. In addition, as organizations begin to use more secondary suppliers, you can use Alteryx to help update a new assembly or formula. With predictive analytics, you can understand variances and play out scenarios as raw materials and parts may change.

5 SUBSTITUTION CERTIFICATION

Many are focused on activating product redesign or materials certification based on current available resources. For some manufacturers, activating new products may be difficult due to parts and material constraints. Due to this shift, many are at a standstill as products will need to be redesigned with more available, recertified materials.

ANALYTICS SOLUTION:

With Alteryx, you can easily do a network analysis to better understand bill of materials and the risks and limits of delivery time. This in turn can be used to prioritize and modify new product designs and accommodate new material availability. variances and play out scenarios as raw materials and parts may change.

6 CAPACITY

Increasing internal capacity to produce more short-supply products impacted by quarantine areas is a top priority right now. In addition, securing additional capacity from tier two and tier three suppliers is also high on the list of considerations.

ANALYTICS SOLUTION:

With Alteryx, you can easily find hidden capacity by improving asset management, analyzing current assets, anticipating and preventing failures. In addition, you can optimize first yields by modifying formulas and recipes to accommodate raw material variances, therefore increasing capacity.

7 ALTERNATE CARRIERS

Securing additional air transportation as supply and capacity increases and shortening freight-based lead times is also top of mind for many in supply chain.

ANALYTICS SOLUTION:

With Alteryx, you can maximize savings by using analytics to visualize current air transportation availability and costs, as well as optimize purchasing by forecasting on-time to available transportation.

8 TIME TO INVENTORY

Moving available inventory away from quarantined areas is also a top concern in supply chain because it can improve the safety of drivers and avoid cross-state, cross-country, and cross-continent contamination.

ANALYTICS SOLUTION:

With Alteryx, you can perform a network analysis to understand transportation policies by product and how a product travels from point A to point B. In addition, you can utilize spatial analytics to understand carrier options, cost construction and build trade area maps to optimize the location of distribution centers and decrease the distance between customers and warehouses.

9 CUSTOMER COMMUNICATIONS

It is important to update customers on delays and adjust customer allocations to optimize profits near-term during this time. Many are turning to a self-service automated alert service or dashboard.

ANALYTICS SOLUTION:

It's possible to build and automate consumption reports inside and outside the organization to gain transparency into the supply chain using Alteryx Connect and Alteryx Server. You can also create a dashboard and use it internally to communicate what's happening, when changes occur, and what supply chain issues arise. By doing so, you are able to optimize communication to customers in a timely manner through the Tableau API.



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LET'S SOLVE TOGETHER

Supply chain management challenges are unprecedented, but not insurmountable. Start solving with Alteryx, free for one month.