

Meeting demand surge effectively using automation and analytics

Meeting new customer needs with smart supply chain planning and demand forecasting



HCLTech focuses on **improving supply chain network insights and enabling timely demand forecasting** for a client facing increased demand during the COVID-19 pandemic. The client wanted to distribute hot and cold beverages effectively across multiple warehouses and optimize operations however due to limited analytics capabilities and manual data evaluation, hindering accurate demand forecasting they faced a huge challenge. HCLTech helped the client with improved supply chain performance, enhanced forecasting accuracy, and ensured efficient distribution to meet customer demands effectively.

The Objective:

Enhancing supply chain insights and demand forecasting



To improve supply chain network insights and enable timely demand forecasting for a client facing a surge in demand during the COVID-19 pandemic. With increased online shopping, consumer beverage sales, and coffee machine purchases, the client needed to distribute their hot and cold beverages effectively across multiple warehouses nationwide. The ultimate goal was to optimize operations and ensure accurate demand forecasting for efficient distribution and meeting customer expectations.

The Challenge:

Meeting demand surge with limited analytics capabilities

The COVID-19 pandemic led to a significant rise in demand, necessitating accurate distribution of beverages across multiple warehouses. Existing business users struggled with limited analytics capabilities and insights into their supply chain network, especially when it came to inventory management. Analysts spent excessive amounts of time evaluating unformatted data from multiple sources like Snowflake, SAP, and Oracle. This manual and time-consuming data evaluation process hindered their ability to perform critical demand forecasting in a timely manner, resulting in potential inventory issues and delays in meeting customer demands.



The Solution:

Streamlined workflows and automated data refresh

Three teams and work streams were established to provide leadership with informed insights on supply chain performance, including prediction, supply, and demand alignment briefings. Specifically, 36 Alteryx workflows were developed as an all-in-one analytics automation solution, catering to different lines of business. By utilizing historical data, the team was able to predict demand for the upcoming week and track inventory performance for a span of up to 4 weeks. A dedicated team of 4 analysts took charge of supporting logistics planning and managing inventory for billions of dollars' worth of goods sold. Through collaboration between HCL and Alteryx, thousands of hours of manual queries were automated, enabling quick response to demand surges through automated data refreshes.

The Impact:

Improved fill rate and cost optimization

The fill rate was boosted to an impressive 90%, with the **average fill rate across the entire warehouse network experiencing a notable increase of 10-15%**. This ensured that stock levels remained adequate, enabling timely fulfillment of customer orders. The solution also led to substantial cost savings, with **\$2-5 million worth of goods saved** from overproduction through effective demand forecasting. Additionally, by automating data refresh with Alteryx workflows, **the solution saved analysts approximately 4 hours of daily work**, allowing them to focus on higher-value tasks.

