INFOSYS REAL-TIME DEMAND SENSING SOLUTION

Protect sales, avoid potential stock-outs, improve customer service and enhance brand experience

Infosys®

Navigate your next

As global events happen, ability to forecast demand becomes critical for enterprises. COVID-19 crisis has brought to fore supply and demand management challenges to CPG's and retailers as consumers stock up in preparation for potentially extended stay at home thus emerging patterns of increase in sales and inventory depletion have emerged. This is putting pressure on supply chains. Consequently, retailers and CPG companies have realized the criticality of sensing the change in demand. Infosys Real-time Demand Sensing Solution uses a wide-range of sales data to improve near-future demand forecasts and take timely actions. Our clients are benefitting from better forecast quality that supports timely decision making.

Taking demand sensing to the next level

Traditionally, demand forecasting is done in advance using shipment information. This works well in the long-term but not for short-term forecasts which requires updated near real-time sales data. Our solution is enabling our CPG client to use daily POS data to analyze key demand signals and make necessary adjustments to manage the supply chain effectively. Our solution uses real-time POS data to deliver insights on shifts in demand across channels, categories and brands that resulted from panic buying. The insights enabled decisions to be made in hours instead of days or weeks, helping deliver two key outcomes:

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Putting the power of demand sensing to work during times of uncertainty

Apart from the historical shipments and consumption trends, our solution enabled client to factor in the huge spike in demand that resulted from panic buying of essentials during the COVID-19 crisis. These trends were visible via demand signals that caught their attention during Feb 2020 and continued to develop nationally, peaking during mid-March. The Infosys Real-Time Demand Sensing Solution analyzed data from sales, supply chain inventory, out of stock and store inventory to provide real-time insights enabling required course correction to minimize out of stock situation and optimize the supply chain.

The sales, inventory, and number of COVID-19 cases were plotted in a time-series graph for the period between January to March 2020. These visual analytics uncovered insight that the additional store inventory (received during Feb) acted as the buffer during this time. Around March 12th, sales saw a sharp spike throughout the state of New York as panic buying had set in. While most stores in the state faced an out of stock situation, our client made necessary demand adjustments and managed the impact. The result of this timely decision were seen from the next week when the stores received additional units.
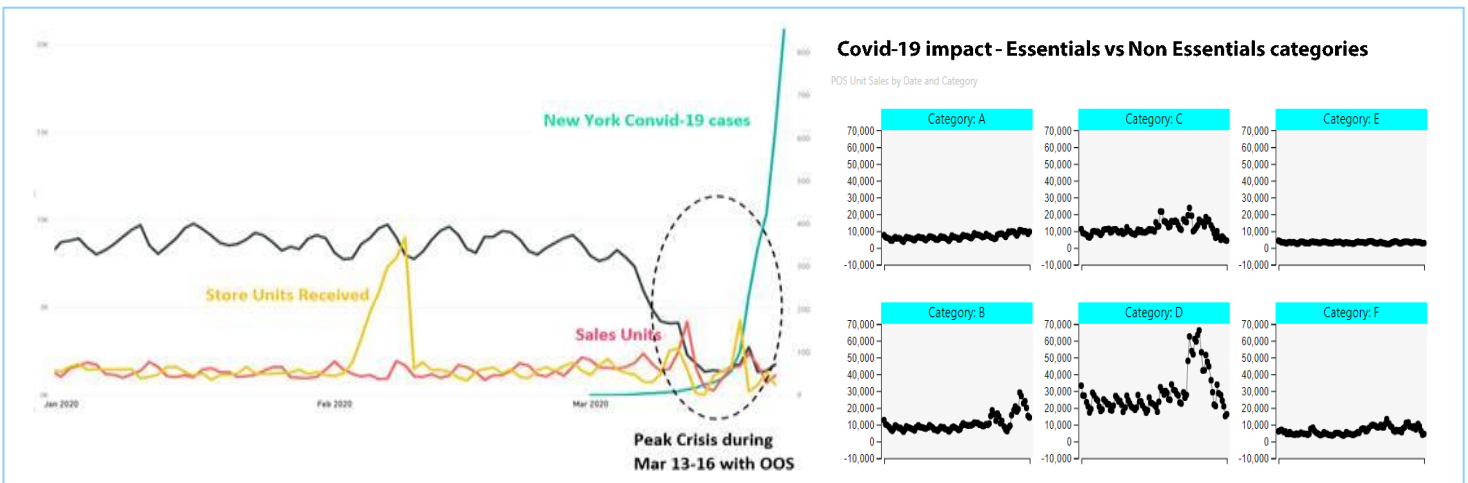
As New York state had the majority of COVID-19 cases reported in USA, our client was able to leverage all the demand signals associated with sales for the specific brand, consumption, price, and socio-economic factors, and use the information to run 'what-if' scenarios to shape future demand. We are further helping our client perform near real-time demand sensing and inventory prioritization for their online channel using ePOS data. Our three-tiered approach on the online channel using Data Acquisition & Harmonization, Predictive Analytics, and Insights & Strategy has helped our CPG client win the On-Shelf Availability, Lost Buy Box Analysis, and Forecasting (Amazon demand at Warehouse/SKU Levels etc.) conundrum especially during these challenging times.

Helping companies stay ahead of the demand curve

Hourly demand insights for a leading retailer

We helped migrate all demand data on to the cloud and process it in real-time using API interfaces to provide hourly insights on demand forecasting. This helped our client with accurate and timely decision making. The demand forecasting patterns were also assessed with Bayesian techniques for enhancing probability-driven analysis.

80-country POS data analysis for one of the largest CPG enterprises

Infosys is already a partner with the company, especially in the area of global POS data analysis across 80 nations and 500 retailers. From February 2020, demand sensing has been leveraged to ascertain the pulse of the market across different retailers, regions and channels, driving inventory allocation and reprioritization accordingly.

Phygital demand enablement for a leading CPG enterprise

With enhanced impetus on digital outreach to consumers, we began tracking demand response, in both the physical and digital worlds. The digital communication to address the demand was made more contextual with known inventory or known unmet demand positions. Plans include social media reports of shortages being used in demand planning.

For more information, contact askus@infosys.com

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