Blue Yonder's Fulfillment Order Forecasting

Purpose-Built E-Commerce Order Planning Microservices

Using Blue Yonder's Fulfillment Order Forecasting, retailers can understand how many e-commerce orders a store will receive to the hour. Order forecasts are generated by location attribute and delivery type – all informed by history, all promotion aware and all managed by demand planners.

Rethinking Labor Models for Modern Store Roles

Consumers are increasingly choosing Buy Online Pick-Up In Store (BOPIS) methods for their everyday shopping. During the pandemic years, when there were few walk-in consumers, retailers could rely on the labor they had traditionally scheduled for service departments, stock management and cash registers to pick and pack orders for curbside delivery. But, as consumers return to in-store experiences, retailers need to rethink their labor models.

With the rise of 3rd party shopping services (Instacart), additional, unforeseen issues have arisen. Shoppers tend to shop in the late morning as orders are batched and dropped in the early AM creating a clustering that can cause "traffic-jams" within the store, with more shoppers than available cashiers or service support.

Retail Execution and Workforce Management Meets Omni-channel Order Delivery

Blue Yonder's Fulfillment Order Forecasting brings our world class expertise in retail execution and workforce management to the problem of omni-channel order delivery. The solution is a cloud-native, lightweight microservice utilizing AI/ML to help retailers address the shifts in consumer shopping habits and enable seemless, efficient growth of BOPIS orders.

Real results:

In 2022

67%

of U.S. consumers placed BOPIS orders

By 2023

90%

of retailers will offer a click and collect option

Source: ESW, https://esw.com/blog/2023-consumer-trends-omnichannel-bnpl-set-to-dominate/

Location Specific Order Counts

Fulfillment Order Forecasting produces a plan of omni-channel orders, by store or warehouse location and order fulfillment type at the weekly, daily and hourly level. With the count of BOPIS or third party supplier orders, retailers can project how much labor they need and exactly when they need it to meet consumer orders.

Traditional retail planning and execution management tools tend to rely on actual POS history, without considering the issues or constraints that may have driven that history. Using machine learning techniques, Fulfillment Order Forecasting considers not only seasonality and trends, but holidays, weather, and time of day. By focusing on more than just history, Fulfillment Order Forecasting can correct for constrained history, react quickly to demand changes and accurately predict order quantities for new stores.

Achieve Commerce Excellence

Higher quality forecasts -> increased accuracy of omni-channel forecasts -> improved labor planning -> increased consumer satisfaction, optimized labor utilization and reduced cost-to-serve.
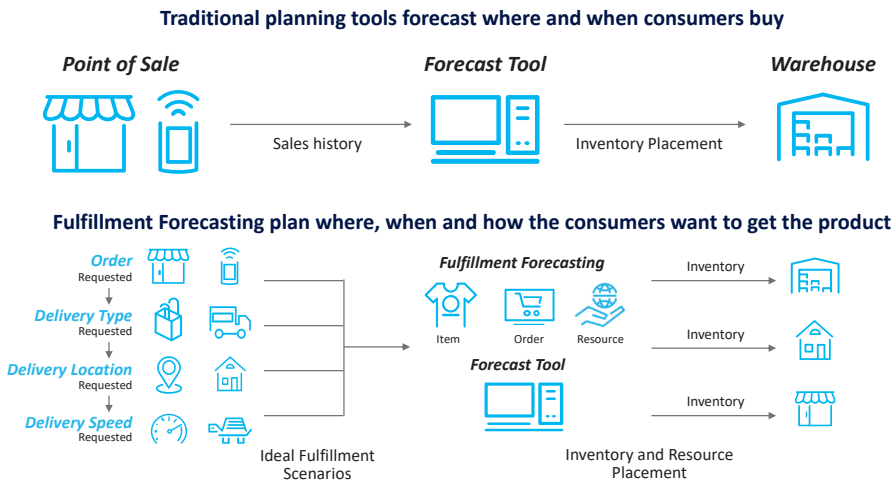
Benefits

- Reduce daily forecast error by 20 – 25%

- Coupled with labor estimation, 15% reduction in overtime

- Superior efficacy in periods of changing demands

- Improved customer service and order on-time fill rates

- Faster capture of demand trends for new stores

Features

- **Highly granular forecasting** – count of orders by time of day, fulfillment type and store from 0-35 days into the future

- **Demand causal and influencer aware** – accounts for DC/store sourcing rules, changing item eligibility, store hours and closures

- **Hyper-local** – accounts for local labor constraints, weather, promotions and events

- **Learning** – integrates third party supplier and marketplace data

Traditional planning tools forecast where and when consumers buy

Point of Sale — Sales history — Forecast Tool — Inventory Placement — Warehouse

Fulfillment Forecasting plan where, when and how the consumers want to get the product

Order Requested, Delivery Type Requested, Delivery Location Requested, Delivery Speed Requested — Ideal Fulfillment Scenarios — Fulfillment Forecasting (Item, Order, Resource) / Forecast Tool — Inventory and Resource Placement

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