

Our point of view

Retail Operations Analytics

Retail Decision-Making, Enhanced

Awash in data, the key decisions that modern retailers make can be improved through analytics. We assist retailers in all the following areas:

Demand Forecasting. When retailers reduce forecast error, they minimize stockouts and lower inventory costs. We tackle the retail forecasting challenges of millions of SKU-store combinations, sporadic demand and frequent stockouts, lack of history for new products, and concurrent demand drivers such as seasonality and product life cycle variation.

Product Lifecycle Transitions. Retailers must align demand and supply during product introductions and retirements. We provide analytical approaches for handling transitions, simultaneously integrating pricing optimization into these processes.

Assortment Optimization. A retailer's product assortment defines the company for consumers. We can optimally size and define assortments where each product adds value. This requires measuring substitution effects, inferring new product demand, and tailoring local assortments. See Figures 1a and 1b.

Fulfillment. Brick & mortar, wholesale, online-only, or omni-channel? Modern retailers often have multiple channels for their products, and fast delivery is a must. We help align complex flows through the supply chain, including reverse logistics and store operations.

Figure 1a

Adding SKUs can drive incremental demand

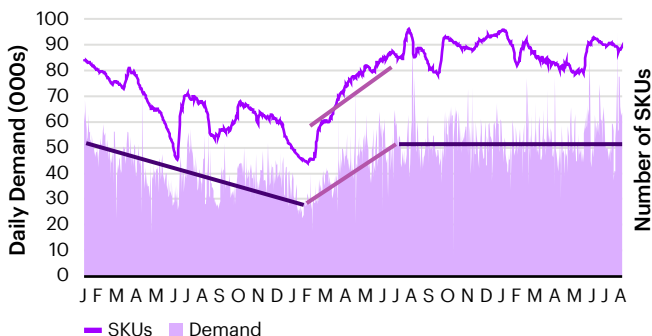
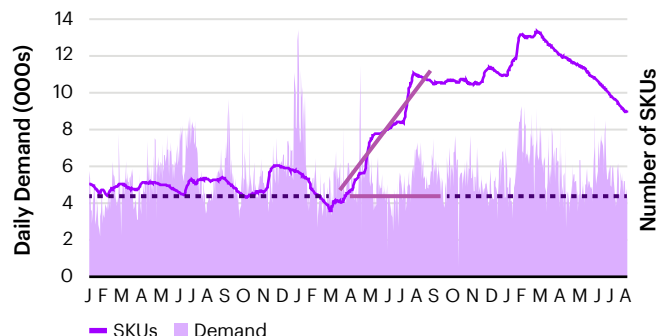


Figure 1b

In a saturated category additional SKUs add no value



Allocation and Replenishment. Retailers want to maximize full-price sales and minimize stockouts and markdowns. Inventory must be smartly allocated by channel and location so it has the best opportunity to sell. Data-driven replenishment considers product seasonality, pricing, stockout vs. overage costs, and the distribution calendar.

Targeted Customer Offerings. Retailers who can truly understand their customers come out on top. We help firms make customer-specific product recommendations, segment their customers into meaningful groups for marketing, and re-engage lapsed customers.

Data and Systems. Rich product and customer data is available from point-of-sale systems, online traffic, social media ad clicks, customer loyalty programs, and external sources. Real-time data updates allow retailers to respond proactively to demand signals to order and allocate product dynamically.

Case Study

An athleisure retailer with 200 stores and 5,000 SKUs faced chronic inventory shortages while simultaneously overinvesting in inventory.

E2E modeled true demand by accounting for stockouts and seasonality, deploying a planning solution to generate regular replenishment orders for all stores.

Figure 2 shows the results: substantial reduction in store stockouts and increased inventory turns.

Figure 2

Better store-level forecasts improve performance

