# CASE STUDY

**ALGONOMY**

## A leading fast fashion retailer

**SEGMENT |** Fashion

**PRODUCT |** Assortment Edge

**CHALLENGE |** Increasing inventory spending and loss of sales due to sub-optimal assortment mix
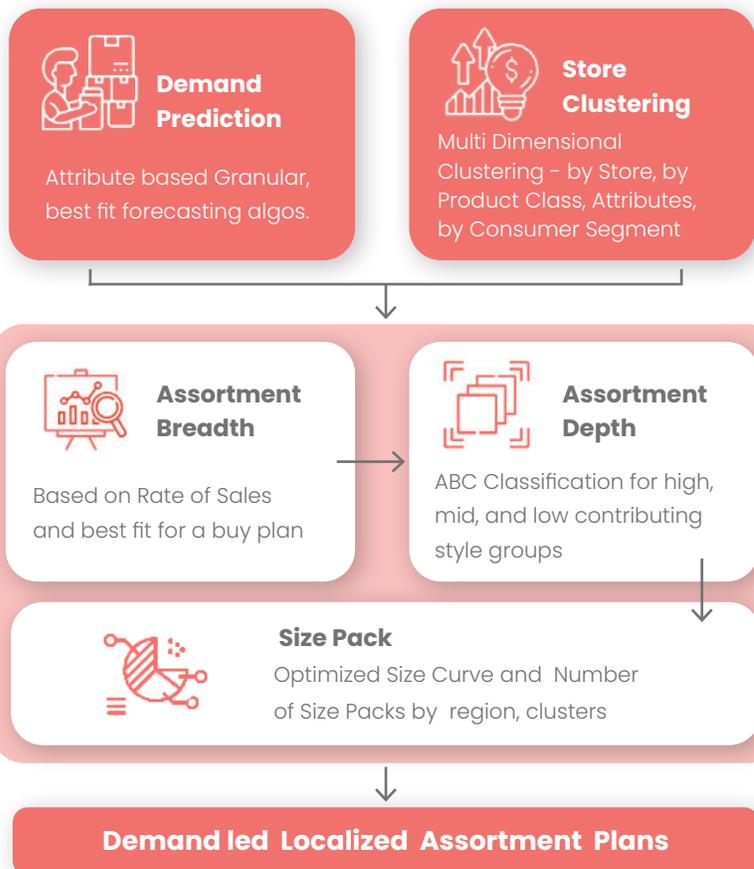
### RESULTS

- Range planning efforts **reduced by 87.5% - 4 hours to 30 minutes per plan**
- Variance between range and financial **plan reduced from 12% to 3%**
- **Reduced overstock** and understock by **4%**
- **3% higher full price** sell-through
- **2% less** end-of-season **leftovers**

The client is one of the leading fast fashion retailers with 700+ stores across the US. The client offers apparels, accessories and footwear targeting young men and women looking for affordable and trendy fashion. The client faced challenges with its existing assortment planning processes

- Assortment range and size planning required 840,000 man hours every month for 300+ product groups across stores

- Large deviation between range plan and financial plan resulted in overstock of 1.6 million units

- Ad-hoc merchandise size planning led to frequent out of stock and customer dissatisfaction

The client was looking for an easy-to-use, intelligence-driven and proven algorithmic solution to optimize assortment and achieve merchandising financial goals.

## ALGORITHMIC ASSORTMENT OPTIMIZATION

**Demand Prediction**

Attribute based Granular, best fit forecasting algos.

**Store Clustering**

Multi Dimensional Clustering - by Store, by Product Class, Attributes, by Consumer Segment

**Assortment Breadth**

Based on Rate of Sales and best fit for a buy plan

**Assortment Depth**

ABC Classification for high, mid, and low contributing style groups

**Size Pack**
Optimized Size Curve and Number of Size Packs by region, clusters

**Demand led Localized Assortment Plans**

## Creating localized, customer-centric assortment

Algonomy's Assortment Edge (AE) was the perfect fit to the client's requirement. AE is designed to expedite and optimize the process of building an optimized assortment. With its smart 1-click automation, AE helped the client automate time-consuming process of planning and the advanced AI algorithms recommended a demand-driven assortment breadth, depth and size pack - minimizing markdowns, controlling inventory spendings and delighting customers.

Our ML-based ensemble of algorithms provided highly accurate, granular and attribute-based sales forecasts. Additionally, it performed store-clustering based on key dimensions such as product class, attributes, consumer segment, etc. With accurate demand and store intelligence, the product recommended optimal assortment breadth, depth and size pack.

The client made the transition from an ad-hoc manual assortment planning to a demand-driven assortment planning powered by intelligent features of Algonomy's Assortment Edge:

- With the help of smart automation, the range planning for each store was reduced to a click from the earlier 4 hours resulting in savings of over 840,000 man hours per month

- Algorithmic range plan recommendations helped achieve the ideal assortment breadth and depth at store-level, reducing the variance between financial and range plan from 12% to 3%

- With size pack recommendations by store, cluster and region, the client optimized the size curve and introduced multiple size packs suited to meet the demand, reduce overstock and understock by 4%

With AE's smart automated workflows and ML-based algorithmic assortment optimization, the client was able to improve productivity of its assortment planners by 0.25 per hour to 2 per hour, achieve 3% higher full-price sell-thru and reduce end-of-the-season leftovers by 2%.

# ALGONOMY