

Solution Brief

FASHION INDUSTRY (FOOTWEAR, APPAREL & ACCESSORIES)

Demand forecasting is more complex than ever and essential to building brand loyalty.

Predicting Demand and Planning Inventory

The new challenges facing the fashion industry are actually the old challenges.

Merchandisers have the difficult task of determining which products are best suited for their brands to sell. Rapidly changing trends, complicated by seasonality, regional preferences, demographics, and the economy, make getting these desired items in-stock, in the right quantities, at the right locations even more difficult.

Accurate demand forecasting enables retailers plan for future growth and investments while building brand loyalty.



Fashion Industry Trends

- Fast fashion and short product lifecycles
- Cannibalization of brick & mortar and etail demand by second-hand and resale retailers
- Complex planning across omni-channel shopping experience
- Complex customer buying journey
- Excess inventory and limited markdown strategy based on ladder logic versus actual sell through
- Rapidly changing consumer preferences

Managing Inventory to Optimize Profits

Treat inventory as an investment to minimize potential lost sales and surplus stock.

Stores carrying the wrong assortments or have too much variety and sizes could lead to overstocks and investment tied up in dead or slow-moving inventory. This is a particularly difficult challenge for footwear retailers.

Footwear is a major fashion accessory that presents retailers with many challenges:

- Managing both fast moving and low velocity products to minimize risks of lost sales or overstock
- Long replenishment lead times that compete with high, "instant gratification" demand and buying channels
- Full range of sizes and styles stock requirements that competes with space constraints

Despite these challenges, footwear also represents the largest profit improvement opportunity. Brands often resort to markdowns to move the slowmoving inventory to recoup some of the investment. If brands use a ladder markdown strategy, they are not capitalizing on the optimal timing and discounting that maximizes profits at the end of the product lifecycle.

With the help of AI and innovative cloud technologies, fashion companies can analyze inventory as an investment and optimize profits.



Accurate Demand Forecasts

Stabilize supply chains, build vendor confidence, and identify profit opportunities.

An industry defined by trends needs leading tools and planners, like 4R to capitalize on the trends and maximize revenue. With 4R AI and cloud technologies, brands can:

- Increase APR, leading to increased profits
- Reduce inventory carrying costs
- Reduce stockouts

Apparel Retailer Case Study

Off-Price Retailer Achieves On-Target Profits

An American national off-price retailer, with 546 stores in 45 states and Puerto Rico, had many inventory management challenges, including:

- Optimizing holiday inventory for major holidays
- Accounting for SKU substitutability
- Accurate vendor order forecast projections
- Seasonality at class/buyer/SKU level

The 4R One Predictive Engine is able to "lookahead" to forecast the upcoming high season. The "look-ahead" delivers the high reorder points earlier, allowing more time to process the large orders through the supply chain and pre-position inventory in advance of sales. This approach compensates for supply chain bottlenecks that occur during high volume periods and protects against forecast timing errors.

With 4R managing over 1.5 million sku/store combinations, the retailer can optimize sales and minimize excess inventory after peak sales periods.

"4R enables us to implement plans for each SKU/store combination, whether the target is to lower or increase inventory. Our inventory is turning better than plan and this positions us to maximize profit and improve the customer experience. Partnering with 4R has been a profitable decision."

- Reduce markdown loss
- Minimize risks with optimized vendor / supplier orders

Footwear Case Study

Retailer increases profit margins by over \$1.5m for 15K+ SKUs in the first year alone.

A department store retail chain struggled with managing its footwear inventory and high carrying costs. They were challenged with increasing competition, eroding margins and emerging channels.

Long timeframes needed to resupply imported goods competed with instant omnichannel demands. This presents major inventory balance headaches. Improving profit margins in this increasingly competitive market requires maximizing sales while minimizing write-offs.

4R provided its One Predictive Engine to deliver accurate demand forecasts down to item level and manage long-life replenishment. This minimizes lost sales, optimizes stock levels across the retail network and builds incremental profitability.

"With 4R we have improved our in-stocks, maximized sales, boosted profits and, most importantly, improved our customer service."

-Director, Retail Marketing

– M. Hall, Replenishment Manager

One Predictive Engine

Take the weight off staff to predict (or go by their gut feeling) what is needed at every store location, warehouse or distribution center.

4R One Predictive Engine (OPE) leverages Al and Machine-learning to create a single source for demand forecasts. 4R OPE guides inventory planning processes to deliver a profitoptimal improvements across supply chain and merchandising decisions.



Profit-optimized Inventory Planning Processes

Demand Planning

Identify true demand, utilizing Al and machine-learning. and generate more accurate forecasts, driving more accurate upstream and downstream processes that maximize profitability.

Replenishment Planning

Enable multi-echelon inventory management that is guaranteed to maximize profit across all channels, reduce inventory carrying cost and deliver superior customer service.

Allocation Planning

Allocate the right amount of inventory to the most profitable locations at the right time, minimize stranded end-ofseason inventory and reduce the need for future markdowns.

Vendor Order Optimization

Enable buyers to make informed decisions on buying requirements when executing demand, replenishment and albcation plans.

Markdown Optimization

Maximize revenue and achieve merchandising goals each season by recommending the optimaltiming and depth of end-of-season and end-of-life markdowns.

Assortment Optimization

Optimize product offerings at each store to meet customer preferences and drive revenue growth through data-driven insights, resulting in improved customer satisfaction.





Why Choose 4R?

The 4R solutions and services drive inventory planning processes to create buying experiences that encourage purchasing and increase customer lifetime value.

Build Better Supply Chains that Grow Brand Loyalty

- Analyze consumer buying patterns to make accurate predictions in the future
- Ensure the "right product' is availabe when and where customers will want to buy them
- Allocate inventory and product mix to the "right places"
- Plan seasonal and perpetual onventory for the "right time"



Inventory and Supply Chain Planning as a Service (PaaS)

4R's team has your supply chain and business covered...360 degrees!

The in-house 4R expert team dominates AI/ML science and technology. They are seasoned demand, replenishment and inventory experts that bring a human touch to the planning process. 4R performs planning activities on behalf the client in seamless collaboration with your management and leadership.

SUCCEED WITH US



The 4R Advantages

- Integrates with and compliments your Execution Systems, providing a structure of existing spreadsheets and basic planning systems
- ✓ Unifies the data into One Predictive Engine for supply chain analysis across planning processes
- $\sqrt{}$ Delivers Best in Class Planning Process Modules
- ✓ Provides outsourced options, which eliminate the need for large capital outlay, shifting costs to Pay-As-You-Go operating expenses.
- $\sqrt{}$ Provides services tailored for continuous improvement and customer success

4R platform and services have proven to help retailers meet customer expectations, improve profitability, reduce inventory, and empower employees - **some clients realizing \$6 million to \$265 million in incremental profit.**

Are you achieving these type of benefits* for your business?



*4R benchmarking results from 40 clients

PO Box 888 | Southeastern PA 19399-9002 | +1 610-644-1234 | optimize@4r.ai | www.4r.ai