INITIAL BUY OPTIMIZATION

The initial buy can be a more profitable buy.

Whether you sell fashion apparel or seasonal products, determining how much to buy is one of retail's oldest and most challenging problems.

Now, 4R's Initial Buy Optimization solution can turn that hit-or-miss exercise into a consistently profitable, and measurable, process.

Profit Optimizing Retail

4R

Forecasting Without Bias

Two common problems with buyer-determined demand forecasts are "owner bias" and "markdown blindness". To avoid that, we use attribute-driven historical demand, normalized for lost sales and markdowns, to determine expected full-price demand.

Forecast Uncertainty is as Important as the Forecast Itself

It's tempting to think of the forecast as a "point projection" –a single number that tells you what demand for an item will be. In reality, it's a number that is almost always wrong!

So in addition to calculating an average full-price demand forecast, we measure the historical dispersion of the demand among items, which indicates the probability of different outcomes. That's critical information for generating a data-driven buy decision.

Our Buy is Profit-Optimized

Using the forecast of demand and probability distribution, we develop a risk-adjusted buy quantity that takes into account product price and cost, price elasticity, salvage value, stranded inventory cost, allocation inefficiency, and customer demand.

We'll Optimize Your Portfolio

Given an Open-to-Buy budget for a category of products, 4R's solution will allocate the money to achieve maximum season profitability by evaluating the financial outcome for every possible combination of buy and demand for each item. It allocates moneys until optimality is reached for each item, or such that the expected marginal benefit across items is constant.

KEY BENEFITS OF 4R'S INITIAL BUY OPTIMIZATION

1. **PROBABILISTIC FORECASTING**: We forecast item demand not just as a point projection, but as a range of values with different probabilities, enabling analytic-based rather than judgment-based decisions.

2. **PROFIT-OPTIMIZED BUY QUANTITIES**: Our buy is a risk-adjusted quantity that takes into account financial factors and supply chain constraints to produce a profit-optimal outcome.

3. **OPEN-TO-BUY OPTIMIZATION:** The solution will produce an optimal allocation of funds if you specify an Open-to-Buy budget across an assortment.

4. **FULL-FEATURED UI**: Our web UI provides end-to-end management of your seasonal buys, from configuration to end-of-season evaluation.

5. **FULL 4R SEASONAL SUITE INTEGRATION**: Our solution is designed to work with our allocation and markdown services to provide a complete seasonal inventory management solution.

6. **SAAS+**: 4R's unique Software-as-a-Service "Plus" delivery model provides dedicated customer service experts as well as cloud-based software. There are no upfront software license fees, hardware hosting costs, or staff training expenses. Our team consults with you on a frequent basis, ensuring you are getting the most out of our solution.

4R CLIENTS REALIZE 1% TO 3% PROFIT INCREASE BY PLACING THE RIGHT PRODUCTS AT THE RIGHT PLACE & AT THE RIGHT TIME.
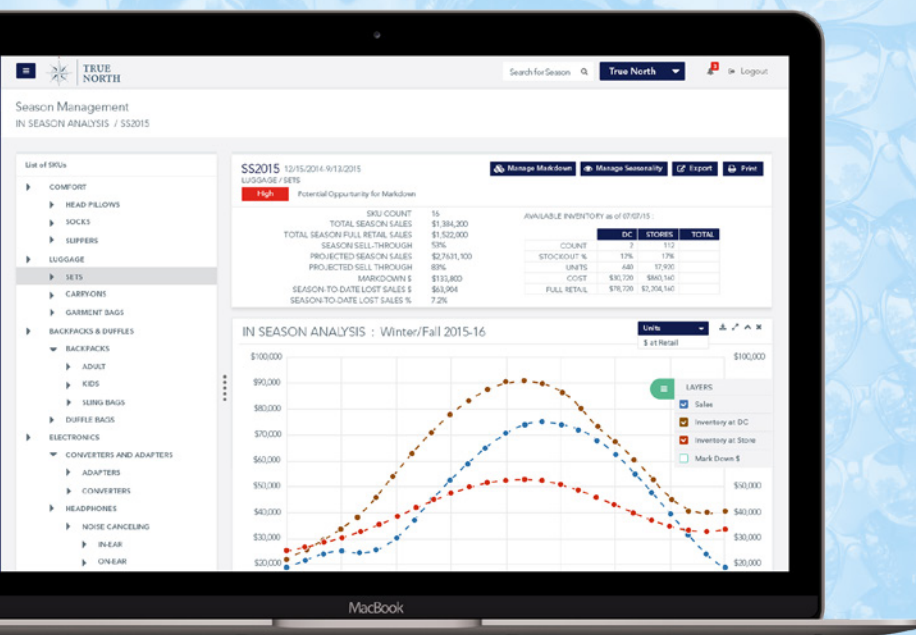
SHORT LIFE-CYCLE RETAIL

Retailers often refer to short life-cycle retail buys as seasonal buys.

While they include seasonal items, short life-cycle encompasses the initial buy of any retail SKU.

Initial buys are notoriously risky. 4R's Initial Buy Optimization eliminates the risk and positions the retailer for greater profit.

It's Part of Our Seasonal Inventory Optimization Suite

The Initial Buy solution is one of three solutions that make up our Seasonal Allocation Suite. It is fully integrated with both Allocation and Markdown, which ensures that all of your seasonal item decisions are consistent and profit-optimized. 4R's Initial Buy solution considers Allocation and Markdown outcomes from previous seasons when calculating buy quantities.

Profit-optimal allocations and markdowns enable more aggressive buys so you avoid leaving money on the table. The output of the buy process can be fed to Allocation to determine the season forecast. All three solutions share UI elements that provide a holistic view of your seasonal inventory status.

Our UI Lets You Control the Buy Process

Our web-based user interface enables you to configure and control the buy calculation process, evaluate the resulting recommendations, make manual adjustments, and track season performance.

It uses profit-focused metrics like Realized Margin, which improves on ROI measurements by controlling for markdowns to reveal the true effectiveness of the buy quantity.

INITIAL BUY HELPS RETAILERS BALANCE THE RISK OF BUYING TOO MUCH AGAINST THE RISK OF BUYING TOO LITTLE

Short-life products present both great opportunities and great risks for retailers. Having enough of the "right" product drives profits on the item and traffic for the store. Having too much of the "wrong" product leads to markdowns which drag earnings and clog the stores.

4R's *inventory as an investment* approach is designed to maximize the profit opportunity of your number one asset: inventory!

Meet Your 4R Team

There is a whole team of people backing our solution. We perform Quality Assurance on our solution every week prior to delivery, and handle all maintenance and calibration functions. Your client delivery representative and analyst will have a call with you weekly to review our deliverables, provide observations about your business, and find out about upcoming changes or initiatives that might impact your business. At periodic face-to-face meetings we review our performance and discuss topics of strategic interest. If you are facing a new challenge related to inventory management and need guidance, our Analytics team is available to help you sort it out. We put a premium on developing a collaborative relationship and work hard to be a strategic partner.

We are a true partner. Learn more at www.4rsystems.com.

4R Systems
801 Cassatt Road, Suite 202
Berwyn, PA 19312 USA

+1 610-644-1234

info@4rsystems.com

US 04/20/17

www.4rsystems.com