4R

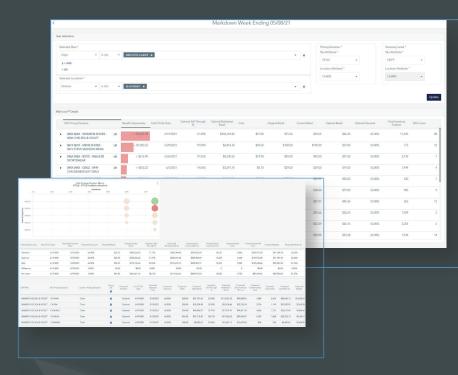


## MARKDOWN OPTIMIZATION

Maximize Profits on Markdowns and Achieve Merchandising Goals

Product markdowns are a fact of life and are often treated as a loss center. Retailers utilize markdowns to move unused, excess end-of-life inventory and end-of-season stock. In additional to buying seasons, there are other factors that prompt retailers to apply markdown strategies.





The economy, changing consumer demands, fluctuating customer preferences, adjustments to assortments due to supply chain issues, store locations and competition are some of the considerations retailers need to account for to optimize markdowns. No matter how accurately retailers determine their initial buy or how well they allocate seasonal products to stores, retailers inevitably markdown some items to stimulate demand and move stock.

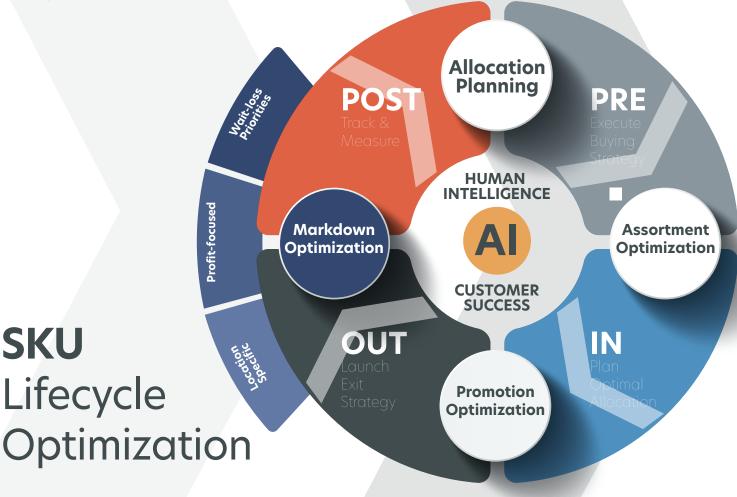
Markdowns do not have to be a reactive response to seasons, the ever-changing trends or unforeseen circumstances. In fact, successful retailers utilize markdown strategies as part of their overall merchandising plan and treat inventory as an investment, instead of a liability. Markdown optimization is a method retailers apply to not only align optimal inventory with forecasted customer demand, but do so in a way that maximizes profits, sales revenue, and inventory consumption. As part of a holistic management of the supply chain, markdown optimization enables retailers to be proactive in their end-of-product lifecycle or end-of season planning.

The 4R Markdown Optimization Solution ensures that retailers achieve their merchandising goals each season, or at the end of a product lifecycle by being proactive instead of reactionary. It is a decision-support tool that analyzes multiple markdown trajectories and reveals the optimal time and discounts for markdowns. The solution considers current inventory levels, upcoming forecast data, and end of life or end-of-season dates so retailers can prioritize the categories that would have the largest impact when the markdown is applied. Simply put, retailers can use Markdown Optimization to make markdowns more profitable.

SKU

Lifecycle

Make proactive and successful markdown decisions and turn markdowns from a loss center to a profit center.



Move end of season products or exit end-of-life products as profitably as possible.

## The 4R Markdown Optimization Solution At-A-Glance

Al-driven Optimal	Prioritized Benefit	Easy Markdown	What-if Scenarios	Customizable	Location-specific
Markdown	Opportunities	Configurations	Simulation	Business Rules	Markdown
Leverage full capabilities of Al to identify optimal time and markdown depth by considering future demand forecast, seasonality, price elasticity factors, end-of-life dates or season-end dates, current inventory, current price and sell- through target	Rank categories with the largest impact if the markdown is put in place immediately and focus on the items most in need of markdown stimulation using the unique 4R Wait-Loss <sup>TM</sup> prioritization methodology	Allow for easy configuration of markdown decisions at any aggregation level with a complete view of inventory	Simulate and evaluate multiple markdown trajectories at different dates and markdown percentages gaining visibility into the projected impacts to reassess markdown strategies and revise markdown planning optimally	Accommodate custom markdown rules that fit your pricing strategy, such as maximum or minimum markdown percentages, increments, rounding rules and markdown frequency constraints	Differentiate markdowns optimally between regions, climates, and store clusters based on location-specific characteristics

# 5 Reasons 4R Markdown Optimization is for You:



**Achieve Business Goals:** Optimize markdowns adapting to goals, whether it is to maximize margins, sales revenue, or clear out inventory



**Maximize Profitability:** Determine markdowns that balance margin reduction against sales increase, finding the sweet spot that results in the highest total profit



**Optimize Demand Throughout Product Lifecycle:** Calibrate price elasticity to determine how products respond to price changes and predict how much of a lift in demand will occur at a given discount level



**Reduce Risk of Excess Stock:** Increase profitable demand of end-of-life or end-of-season items by optimizing the pricing strategy of each item over its lifetime



**Streamline Assortment Changes:** Clear inventory ahead of planned assortment changes, allowing new assortments to flow smoothly into stores



### Why Choose 4R?



#### Predictive Demand Planning

Machine learning forecasting solution identifies pure demand with our proprietary approach to demand decomposition and lost sales estimation.

#### Replenishment Planning

Delivers true multi-echelon recommendations for every SKU at every location within.

#### Allocation Planning

Allocates the next unit of product to the best store that maximizes in-season sales and minimizes stranded end-of-season inventory.

### Assortment Optimization

Identifies the most profitable assortment of products for each location.

#### Markdown Optimization

Maximizes full sales price while at the same time exiting the seasonal cycle as profitably as possible.

- Highly experienced SCM and analytics team that can help guide you towards a fast ramp-up and quick results.
- Harness the power of Big Data and Machine Learning to drive insights.
- Monitoring and measurement of critical events in your supply chain that require attention and real-time adjustment.
- > Proven algorithms that reduce complexity and optimize inventory performance.
- Integration of customer data, ERP, marketing, distribution and CRM data to provide analysis and insights on critical forecast & profitability variables and promotion effectiveness.
- Scalable solutions that grow with your business, so you pay only for what you need.
- > Quarterly health reports that include a wide array of performance data.

"We are always looking for ways to enhance the in-store experience for our team members and guests. The 4R solution will build on our existing inventory management processes to simplify store operations and dramatically improve our in-stock position. As we look to optimize inventory across the board, 4R is delivering a solution with robust insights and data to drive sales and make it easier for our team members to provide the items our guests need while on the road."



~ Brian Ferguson, Chief Merchant Pilot Company

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