



# MARKDOWN OPTIMIZATION 2.0

**Maximize seasonal sales and profitability with 4R's markdown solution.**

## Markdown Optimization 2.0

- Decision support for planning markdowns
- Alerts retailer if the optimal or desired markdown is not realistic or might put profit at risk
- Focuses on most profitable markdowns first: those that generate the highest revenue
- Adapts to your business goals
- Proactive, not reactionary
- Fast implementation: 3-6 weeks
- Takes into consideration specific and customizable business rules when making recommendations (i.e. first markdown must be 20% or greater, markdown cannot exceed 50% drop within one week)

**4R's** **Markdown Optimization Solution** ensures that retailers achieve their merchandising goals each season by recommending the optimal timing and depth of end-of-season markdowns. It is a decision-support tool that analyzes multiple markdown trajectories and reveals the optimal time and settings for markdowns. Essentially, it helps prioritize the categories that would have the largest impact if the markdown is put in place immediately. So, it can help maximize revenue based on current inventory levels, upcoming forecast data, and end of life or end of season dates. Simply put, retailers can use Markdown Optimization 2.0 to make markdowns more profitable.



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## Markdowns Are a Fact of Retail

No matter how accurately you determine your buy or how well you allocate your seasonal products to stores, you will inevitably have to mark down some items in order to stimulate demand. This can be due to unforeseen circumstances like changes in weather, or the overall economic health of the nation. Markdowns may sound reactionary on the surface, but successful retailers use markdown strategies as part of their overall supply chain plan. 4R's Markdown Optimization solution doesn't reveal the same answer for everyone. It considers your business goals, whether it be to increase sell-through or to increase revenue. It also provides the option to select specific dates and considers other business rules – such as maximum or minimum markdown percentages or increments. Further, retailers can shift their strategy if demand varies or there are external reasons that impact the strategy, such as major economic changes.



Markdown Optimization 2.0 helps you determine when and how much to discount those items to meet your merchandising goal, whether it is to maximize profit, sales revenue, or inventory consumption.

### 4R's Difference

Many markdown solutions are geared toward high sell-through. It can be a beneficial focus, but Markdown Optimization 2.0 is more flexible and adapts to your business goals. If optimizing revenue is your business goal, Markdown Optimization 2.0 creates a recommended plan for the best timing and level of markdown throughout your supply chain. It also provides additional trajectories in order for the customer to understand the impacts of taking a different markdown than what is recommended.

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### It All Starts with Price Elasticity

A key element in markdown optimization is determining how your products respond to price changes. Items that are highly price elastic will see a large increase in demand with even a modest reduction in price, while inelastic products will barely budge unless the markdown is deep.

4R's Markdown Optimization solution calibrates price elasticities across all products that you sell, so that you can predict how much of a lift in demand will occur at a given discount level.



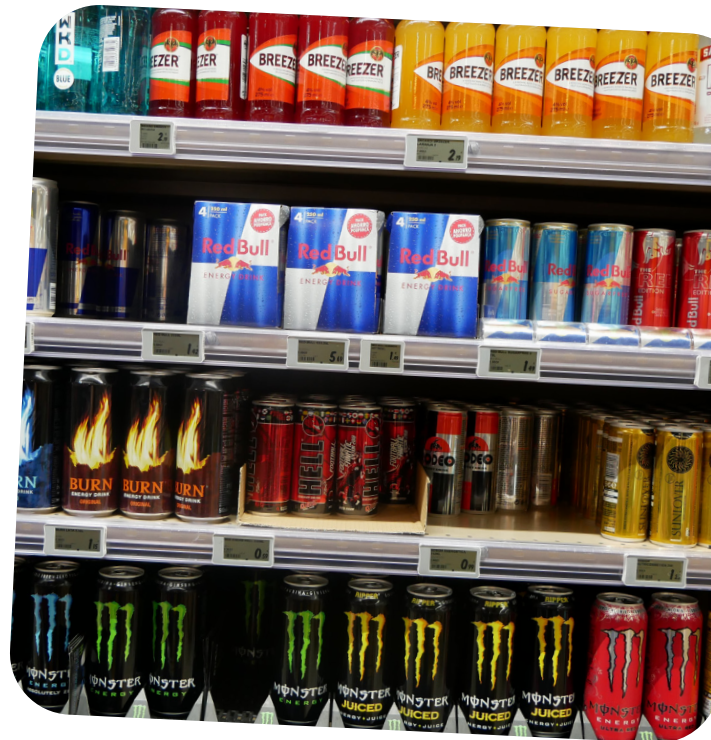
## Comprehensive

4R's Markdown Optimization addresses numerous factors to determine markdown projections. These include, but are not limited to, future demand forecast, seasonality, price elasticity factors, end of life dates or season end dates, current inventory, and current price. Markdown Optimization helps retail and c-store clients simulate and evaluate various markdown scenarios, including timing, and can produce a "what if" analysis if they want to pursue a different markdown strategy. These show what your markdown strategy would generate in terms of potential revenue, potential sell-through, and pricing.

## BENEFITS AT A GLANCE

1. 4R Markdown is fully integrated with our Seasonal Allocation solution; they share Web UI components and forecasts that simplify management and ensure consistent decisions.
2. You choose your optimization goal: profit, sales revenue, timing or inventory consumption.
3. 4R Markdown can be used in decision support or "lights out" mode.
4. Our unique Wait-Loss™ prioritization methodology enables you to focus on the items most in need of markdown attention.
5. We leverage the knowledge of the planning team: our Web UI enables planners to define seasons and participate in the forecasting process by assigning and adjusting seasonality profiles to use for the assortment items.
6. We use advanced forecasting techniques: our read-and-react strategy blends different forecast components based on point in season to adapt to changing conditions and incorporates the effect of markdown decisions once they are put into action.
7. 4R Markdown is cloud-based: you don't have to purchase hardware or software or receive training; all you do is set up data exchanges and use our Web UI.
8. SaaS+: 4R's unique Software-as-a-Service "Plus" delivery model provides dedicated customer service experts as well as cloud-based software. Our team performs Quality Assurance on our deliverables and consults with you on a weekly basis. They act as an extension to your team, ensuring you are maximizing the optimal value.

**Wait-Loss™**  
refers to the  
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## Read-and-React Forecasting Allows You to Pivot

We use a proprietary forecasting methodology that adapts to changing conditions over the course of the season. That allows us to accurately predict how much is going to sell, and when, by making the best use of the most relevant information at any given point in time.

## What's Your Goal?

Once you know how a product will sell at different price points, you can choose the timing and depth of markdown that achieves your merchandising goal. If you want to maximize profitability, you want a markdown that balances margin reduction against sales increase, finding the sweet spot that results in the highest total profit. If revenue is your primary concern, the best markdown will balance retail price reduction against sales increase. To maximize inventory consumption, your markdown should take you to zero units just as the season ends (and no sooner!).

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

4R's Markdown Optimization works on autopilot and will show you all of your options so you can make the best decision based on your specific business goals and objectives.

## Wait-Loss™ For Markdowns

No, we're not talking about a new diet fad; Wait-Loss™ refers to the cost you will incur on a given item if you don't take a markdown right now. By focusing on the items with the highest Wait-Loss, you can make sure you are taking action where it is most urgently needed.

Our decision support Web UI includes a navigator that ranks your items by Wait-Loss, a drill-down page that shows the impact of an immediate markdown for a chosen item and helps you decide what action to take, and an aggregate viewer that lets you see the overall impact of the decisions you are making across your assortment.

## Ready to Rebuild Your Supply Chain?

Markdown Optimization is just one way 4R can help retailers, c-stores, CPG and other brands Refocus supply chains, Regain revenue, Revive the customer experience, and Refine inventory strategies. Contact us today to get started with 4R's Markdown Optimization solution or to learn more about our other state-of-the-art supply chain solutions.



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