4R

Intelligent Inventory Optimization

REPLENISHMENT
PLANNING

Achieve the most profitable inventory level
and deliver superior customer experiences.

Replenishment planning is complex, especially for businesses with multiple channels, locations, and vendors. Every additional channel, location, or supplier has its own considerations that impact replenishment and complicates planning. The process of re-ordering low or out-of-stock inventory for in-demand products to ensure a positive customer experience, maximizes profits and minimizes costs requires Artificial Intelligence (AI) and advanced analytics.
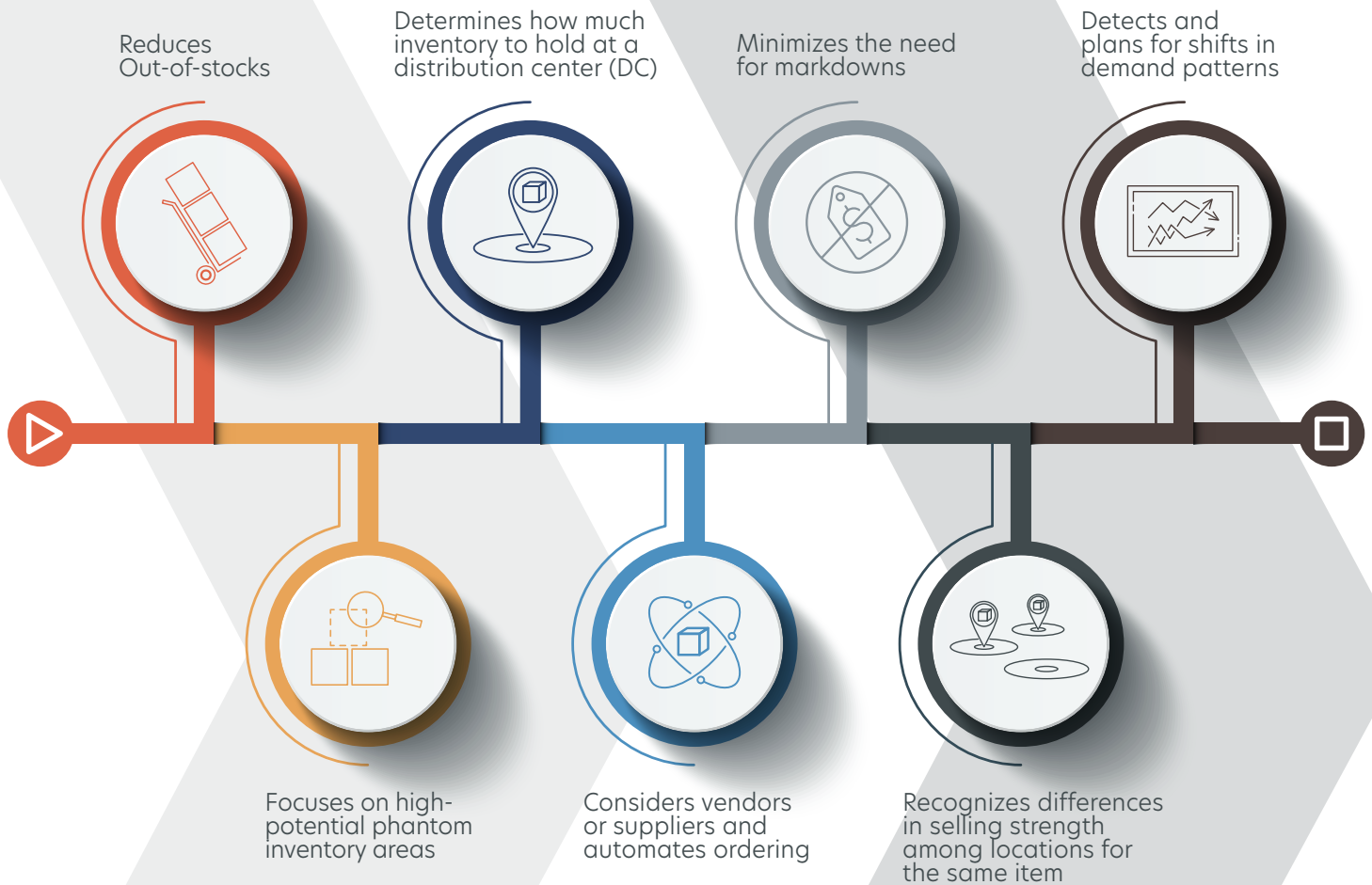
AI and advanced analytics built for replenishment analyzes demand patterns, inventory costs, margins, case pack size, lead time and other supply chain parameters to help Replenishment Planners determine the right inventory levels that maximize profitability.

A good replenishment plan achieves more than re-ordering in-demand inventory.

Successful replenishment planning:

Reduces Out-of-stocks

Determines how much inventory to hold at a distribution center (DC)

Minimizes the need for markdowns

Detects and plans for shifts in demand patterns

Focuses on high-potential phantom inventory areas

Considers vendors or suppliers and automates ordering

Recognizes differences in selling strength among locations for the same item

The 4R Replenishment Planning Solutions leverage machine learning and AI to provide businesses a wholistic view of the supply chain and actionable data to achieve the most profitable inventory levels.

The 4R Replenishment Planning Solutions At-A-Glance

Store and Omni-Channel Replenishment	Distribution Center (DC) Replenishment	Vendor Order Optimization	Phantom Inventory Identification and Replenishment
Automatically determines the level of inventory at all selling nodes that will maximize profits	Measures the true demand on distribution centers to determine how much inventory to hold at the DC and reduce total supply chain inventory costs without losing sales	Calculates orders to suppliers that considers inventory across all echelons. Provides long range order forecasts to vendors to help them plan better and improve fulfillment, leading to higher sales and reduce safety stock requirements	Target stores, items or specific root causes of phantom inventory and apply actionable data to address possible causes. Actions include cycle counting and operational tasks that position inventory, making it available for purchase

5 Reasons 4R Replenishment Planning is For You:

1 Leverage AI-powered forecasting and replenish stores, Fulfillment Centers and Distribution Centers with the right amount of inventory at the right time to achieve highly accurate forecasts across omni-channel demand

2 Simulate and analyze the potential impact of future decisions through 'what-if' comparisons, including different inventory levers, supply chain parameters, open-to-buy constraints and presentation minimum requirements

3 Generate long range order forecasts that can be shared with vendors for visibility to future need and also leveraged to plan personnel schedule around higher or lower demand periods, resulting in higher fulfillment rates and shorter lead times for DCs

4 Enable DC reorderpoints to take into account all channels of demand against the DC, including brick-and-mortar store, Internet, catalog, and wholesale channels

5 Systematically evaluate and recommend where the high probability for phantom inventory exists within stores and districts, directing the retailer to focus effort on the problematic and highest potential opportunities to increase sales and ultimately profits

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

4R | 801 Cassatt Road, Suite 202 | Berwyn, PA 19312 USA | +1 610-644-1234
optimize@4r.ai | www.4r.ai