4R

Intelligent Inventory Optimization

HOME
FURNISHINGS

Leverage AI and your existing systems to improve your agility to respond to LOCALIZED demand and your ability to monetize INVENTORY investment.

Forecast, Synchronize, Optimize, Stay Competitive

US consumer demand trends for home furnishings and furniture are shifting due in part to low unemployment, increasing wages, and hot home sales in suburbs.

Consumers are shopping online, but still want the in-store experience to see products and product sets, and to customize or configure products to their needs and preferences. Furthermore, they want their orders delivered together, quickly.

To stay competitive, retailers must meet consumer needs and provide positive buying experiences both online and in stores. Success hinges on their ability to forecast, synchronize and optimize both sides of the retail business model BUY (supply) and SELL (demand). Successful retailers fulfill consumer needs by strategically placing inventory throughout the supply chain.

Meet LOCAL Consumer Demand and Expectations

To compete (or survive) in these turbulent times, retailers must optimize inventory to meet LOCAL consumer demand and expectations:

Customizable – Quality – Price – Selection – Quick delivery of orders, all at once.

According to a recent Retail Systems Research report, "Offering local flavor in stores provides a point of differentiation for forward-thinking retailers… Smart localization involves supporting local variety via centralized processes and systems."
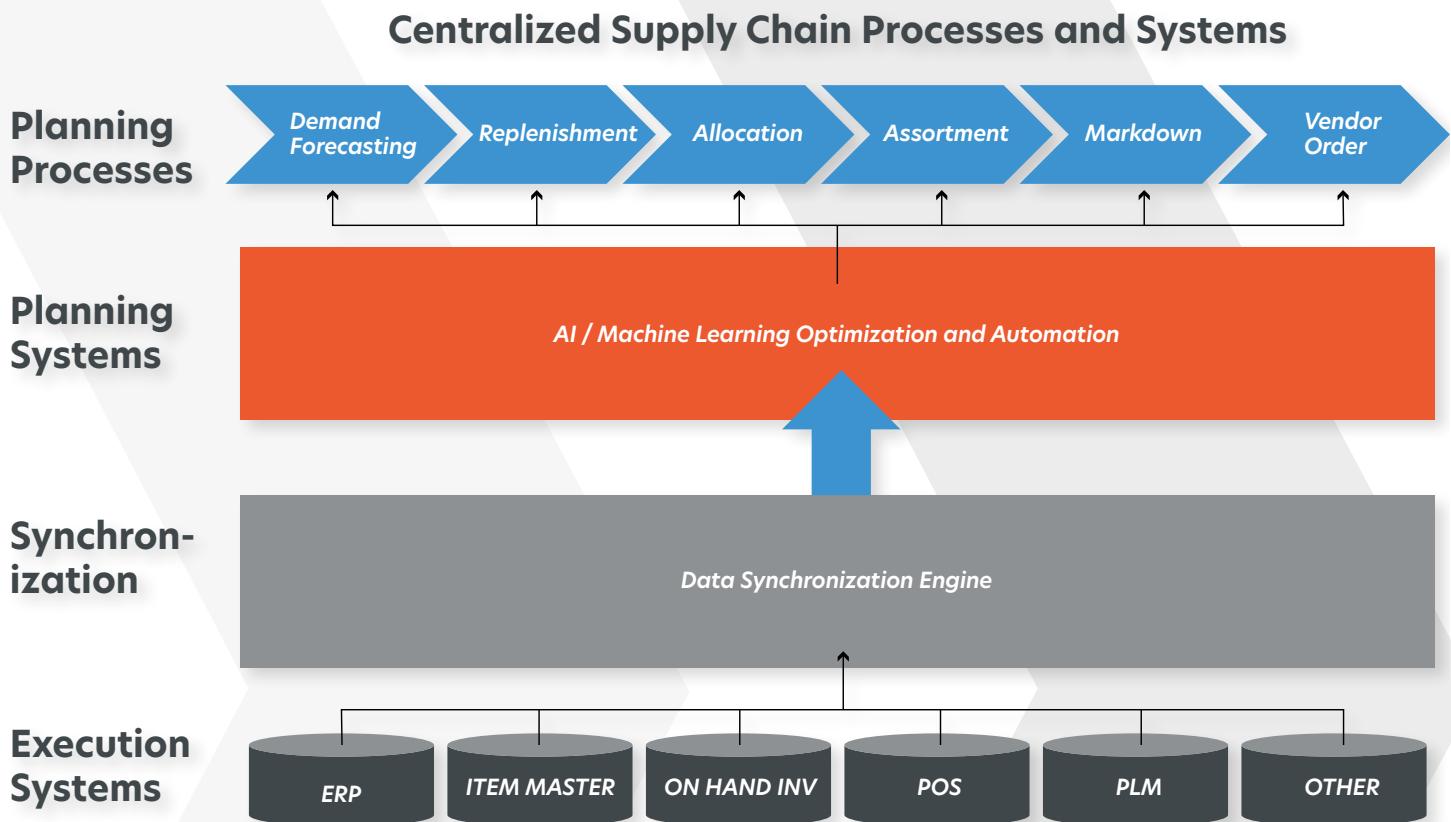
Top 5 Retailer Challenges in the Next 12-18 Months:

- Need to improve inventory productivity
- Need to monitor supply chain, DC/warehouse, and picking capability
- Need to increase profitability of online order fulfillment
- Need to improve on-shelf availability
- Need to better secure access to supply from sources

Source: RSR (Retail Systems Research) Benchmark Study Feb 2021

Layers of Inventory and Supply Chain Optimization

The diagram below illustrates a centralized processes and technology stack to achieve smart localization and supply chain optimization that responds to consumer demands for "relevant products" during the shopping experience.

Centralized Supply Chain Processes and Systems

Planning Processes

Demand Forecasting	Replenishment	Allocation	Assortment	Markdown	Vendor Order

Planning Systems

AI / Machine Learning Optimization and Automation

Synchron-ization

Data Synchronization Engine

Execution Systems

ERP	ITEM MASTER	ON HAND INV	POS	PLM	OTHER

Supply Chain Execution Systems: Collects and maintains data; Executes supplier ordering and inventory tracking and placement

Synchronization: Brings together data from source systems; Prepares it for optimization and planning

Optimization: Applies AI/ML science to analyze historical data at the item and store (local) levels and other factors like demographic data (agve, income, gender, rural vs urban, etc.); Predicts and optimally matches consumer buying behaviors with the right assortment and allocation of products at the appropriate location and time

Planning Processes: Optimizes inventory, increases productivity and enables better decisions about inventory allocation, replenishment, and item/store level assortment that minimizes lost sales, maximizes profits, and reduce cash-to-cash cycle

4R Solutions for Home Furnishings

Demand Planning and Assortment Optimization

Key Features:

› Granular level forecasting and use of internal and external data factors (i.e., demographics data, social media/influencers, etc.)

› Market driven store level assortments and offerings

› Inventory allocation and supplier order coordination and visibility to ensure your products are in the right place at the right time to meet consumer demand

Retail Systems Research (RSR) Benchmark Study Recommendations:

• Resist the temptation to think of 2020 as an anomaly

• Double your efforts on inventory visibility/availability

• Embrace the role of AI

• Stop blaming legacy technologies, replace them

• Abandon any notion that things will soon return to normal

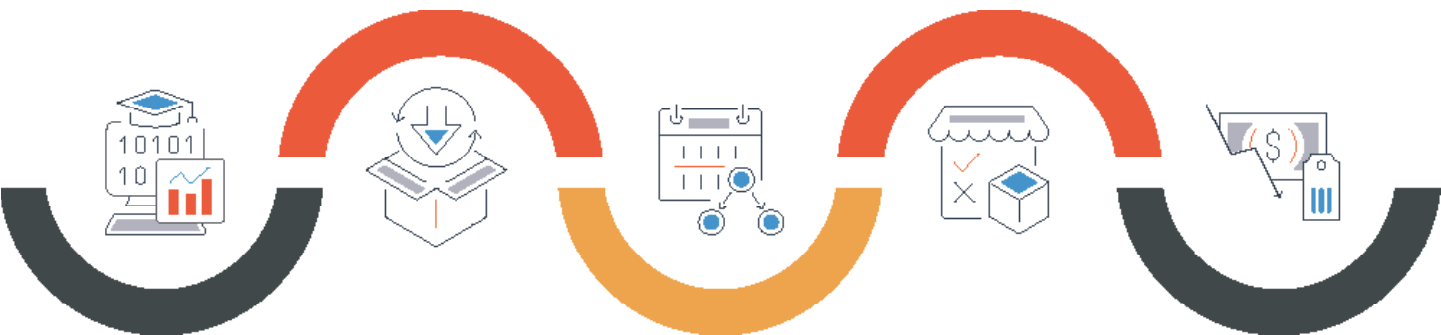*Source: RSR (Retail Systems Research) Benchmark Study Feb 2021*

Drive Smart Localization and Profits

The 4R solutions and services for retailers do the heavy lifting of inventory tracking and order management, honing on what is needed to drive smart localization and profits. The 4R tools help retailers reclaim time to spend doing the things they enjoy most about being home furnishing and furniture retailers- working with customers on choosing the right furnishings for their indoor and outdoor living spaces.

AI-Powered Agility

Respond with agility to satisfy local demand and delight consumers in the midst of an increasingly disrupted global supply chain and ever-changing economic conditions.

Predictive Demand Planning
Machine Learning-based forecasting solution that maximizes profitability and supply chain efficiency.

Replenishment Planning
Multi-echelon inventory management that is guaranteed to maximize profit across all channels.

Allocation Planning
The right amount of inventory to the most profitable locations at the right time to maximize sales and minimize stranded inventory.

Assortment Optimization
Optimize product offerings at each store to meet consumer preferences and drive revenue growth.

Markdown Optimization
The optimal timing and depth of end-of-season and end-of-life markdowns to achieve merchandising goals.

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.

"It is really the benefit of the surgical analysis, which was impossible for us to do ourselves. 4R really helped us. The results were across the board. When you talk about lost sales and inventory carrying costs, the gains we realized were huge and exactly what 4R predicted."

~ Eric Kang, VP of Supply Chain
Sur La Table

4R