4R

Intelligent Inventory Optimization

REAL-TIME SUPPLY CHAIN VISIBILITY FOR **RETAILERS**

Do you still rely on store associates to track inventory and orders to keep shelves stocked?

There's a much better way!

Drive Your Business to Meet Ever-Changing Needs

According to Gartner, 94% of leaders say they need to understand the latest technology innovations that will enable them to bring better data and predictive capabilities to the business. It is no wonder the industry is rapidly going through a digital transformation.

The **increasing consumer demand for digital shopping** experiences has driven the retail industry's **digital transformation.**

Retailers that adapted to provide online shopping experiences quickly realized that these technologies produce a massive amount of data. As a result, their internal systems and processes for managing inventory and the supply chain became increasingly ineffective.

Traditional systems that keep track of inventory were designed for merchandise management and accounting, not forecasting and planning.

Strategic placement of inventory and the agility to adjust to unplanned events or changes to consumer preferences are near impossible without the external data from customer-facing selling technologies. For this reason, many digital transformation laggards struggle with supply chain issues and poor inventory efficiency.
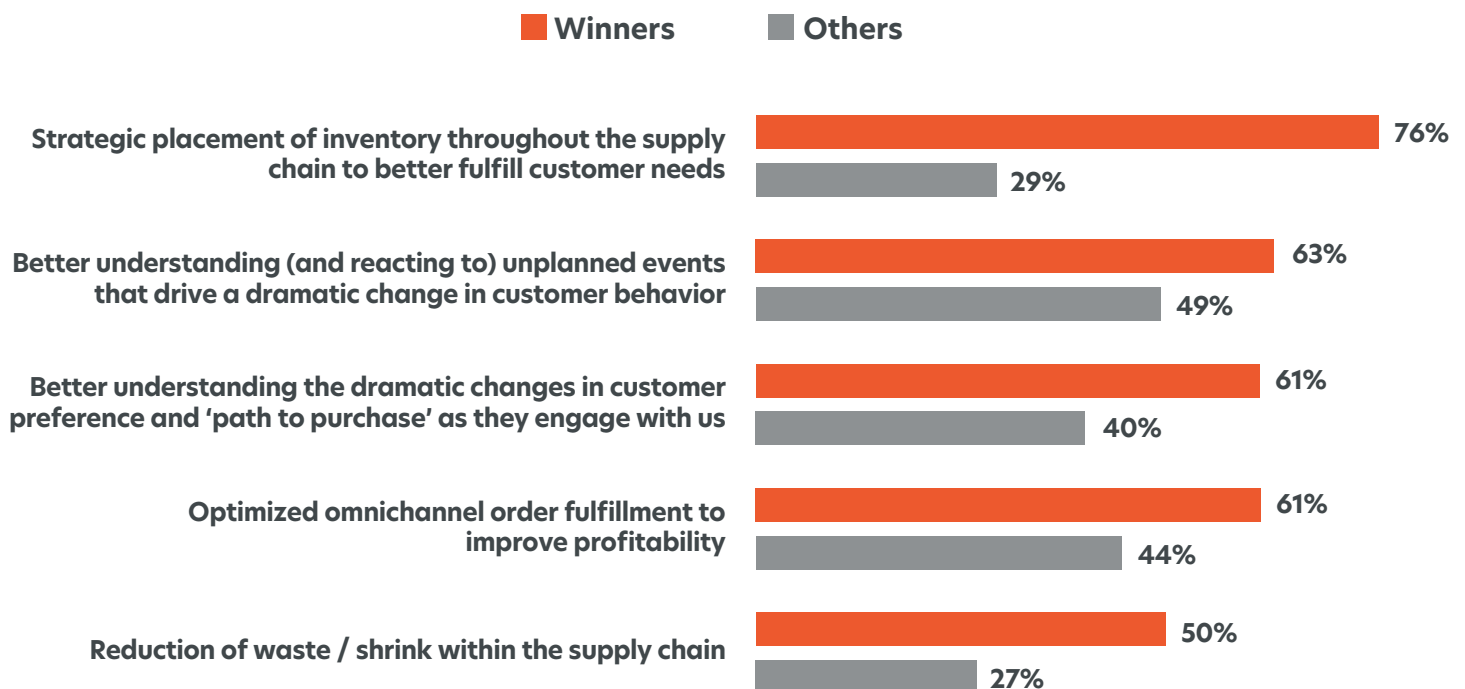
94% of CEOs want to maintain or accelerate the already intense pace of digital transformation programs.

~ Gartner

Address Challenges in a Highly Competitive Market

There is an opportunity for these laggards to increase their agility to respond to trends and make better decisions to maximize their inventory investments. The table below, from the 2021 RSR Benchmark Report illustrates the big opportunities successful retailers (high sales performance year over year) view as methods to address the challenges associated with highly competitive retail environments.

'Big Opportunity' To Address These Challenges

■ Winners   ■ Others

Challenge	Winners	Others
Strategic placement of inventory throughout the supply chain to better fulfill customer needs	76%	29%
Better understanding (and reacting to) unplanned events that drive a dramatic change in customer behavior	63%	49%
Better understanding the dramatic changes in customer preference and 'path to purchase' as they engage with us	61%	40%
Optimized omnichannel order fulfillment to improve profitability	61%	44%
Reduction of waste / shrink within the supply chain	50%	27%

The next phase of the retail digital transformation: AI/ML powered tools.

Seventy-seven percent of these retail winners cite "being able to produce highly accurate and granular forecasts" as the highest value thing they can do. Today's next-generation, AI/ML-based tools help retailers predict demand at the most localized and granular levels, giving them the ability to accurately align supply throughout the supply chain and optimize inventory at every location.
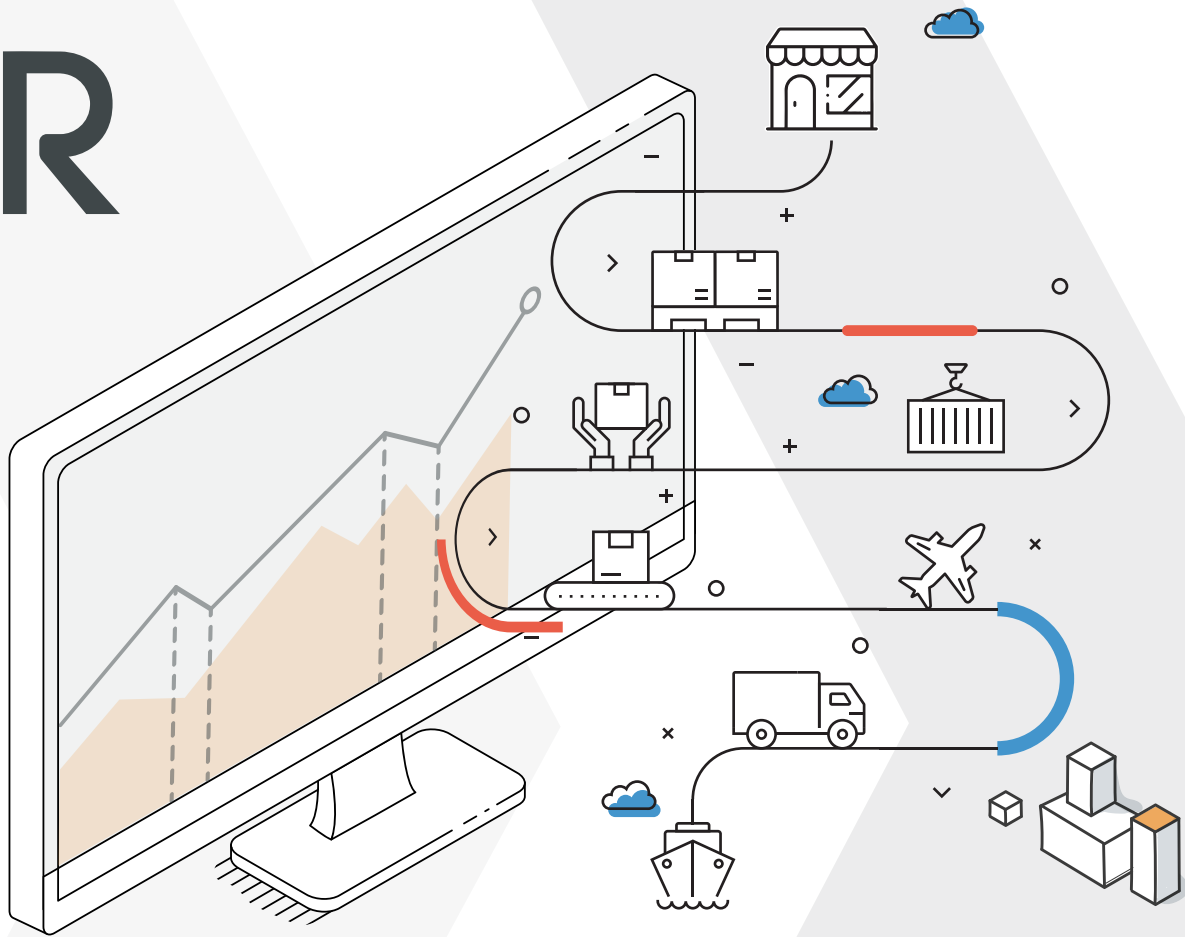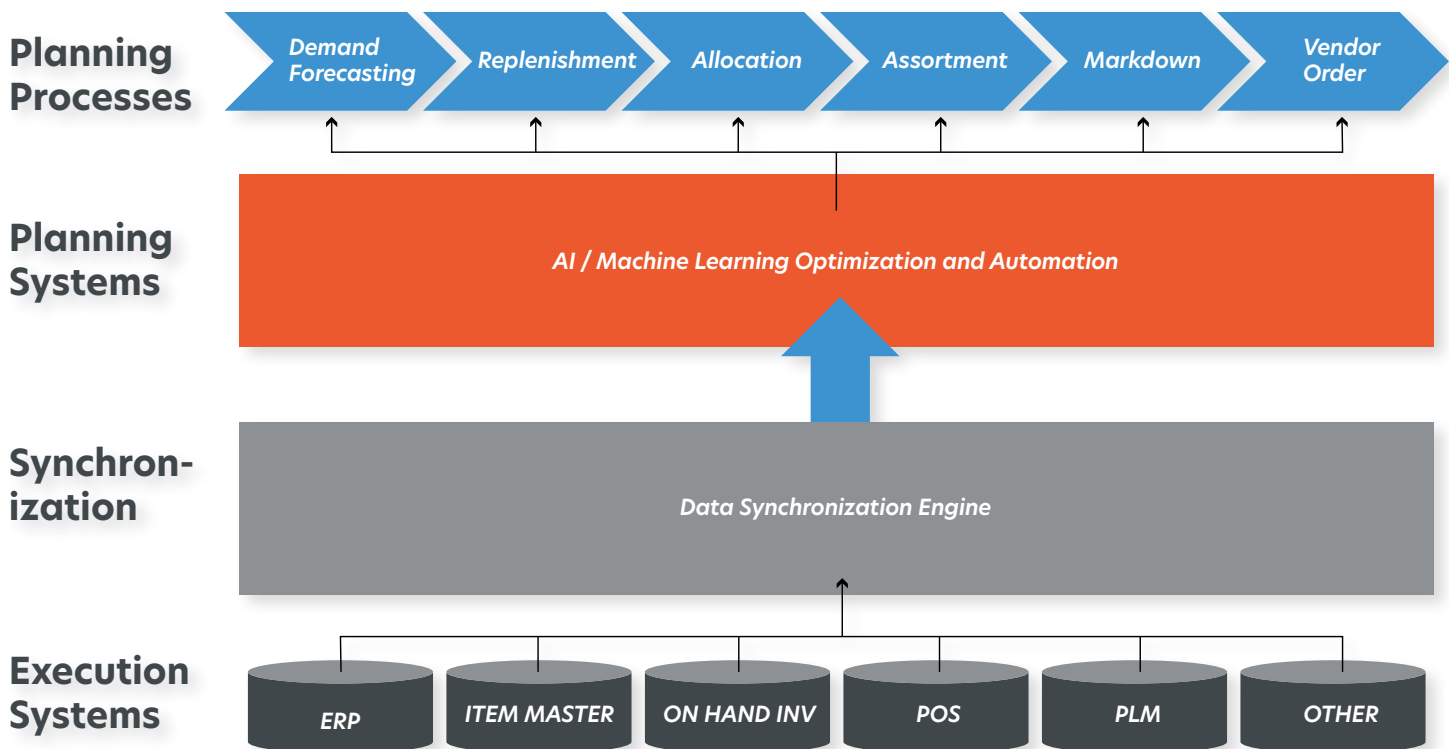
Innovate Your Supply Chain

Manage Inventory as an Investment

Inventory is the greatest investment in retail. Managing inventory as an investment requires AI and advanced analytics to:

› Identify true demand and predict shopping trends to drive forecasts across all channels by leveraging existing POS and supply chain data

› Proactively identify excess inventory builds and loss sales at each product/location before it happens

› Plan and order the optimal assortment and allocation of products to each product/store consumer profile

› Automate the replenishment process for stores and distribution centers through optimized vendor orders

› Calculate optimal markdown of end-of-season or end-of-life items to preserve profitability

› Connect store operations with corporate strategies to resolve issues like phantom inventory

Levels of Supply Chain Planning and Execution for Inventory Optimization

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

Why Choose 4R?

The 4R suite of AI-powered supply chain management and inventory optimization solutions and planning team are meeting the challenge of today's turbulent consumer markets.
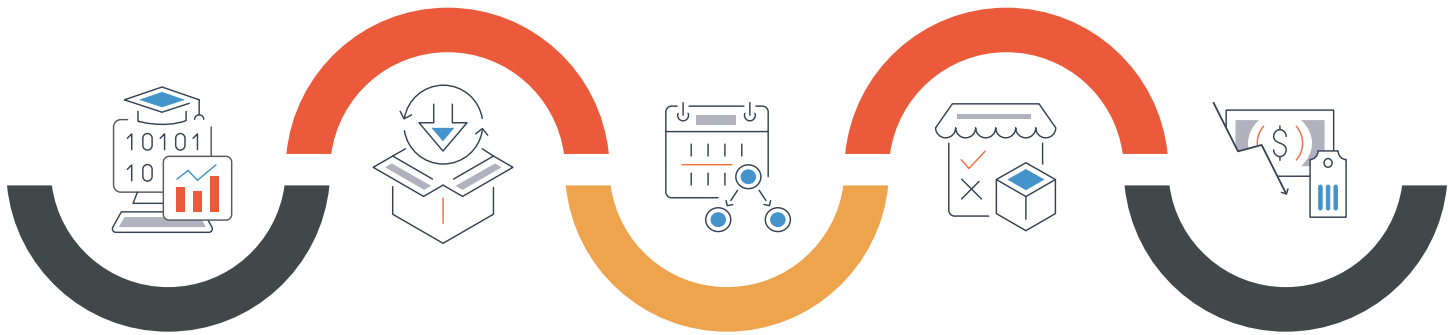
Predictive Demand Planning
Machine Learning-based forecasting solution that maximizes profitability and supply chain efficiency.

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

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

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.

Are your supply chain planning team and your current solutions achieving these type of benefits* for your business?

INCREASE SALES BY 12-18%

INCREASE PROFIT BY 6-10%

REDUCE INVENTORY CARRYING COSTS BY 2-8%

REDUCE STOCK-OUTS BY 14-25%

REDUCE MARKDOWN LOSS BY 12-20%

*4R benchmarking results from 40 clients

Supply Chain Planning as a Service

Let 4R harness the power of AI/ML planning for you

Shore up your team with experienced and certified inventory and supply chain talent to strengthen your supply chain.

The initial impacts of the pandemic revealed the importance of supply chain planning to the world. Even as companies scramble to implement leading practices, proper processes and technologies to get back to normal, let alone optimized, only a fraction of companies have sufficient internal talent who can manage all aspects of their supply chains. Companies are engaged in a raging war over a very small population of experienced supply chain planning talent.

Disengage from the War for Talent and let the team at 4R help you build a strong and resilient supply chain.

PaaS Best Practice

4R Planning as a Service (PaaS) brings planning best practices and focuses on the things that matter to your business like, forecasting and monitoring plans, acting on service level exceptions to optimize inventory and replenishment cycles, and mitigating risks of overstock and lost sales.conversion cycle.

The 4R tools help retailers reclaim time to spend doing the things they enjoy most about being a retailer.

Does your Supply Chain team...

- Proactively analyze future product-store/channel demand for loss sales and excess inventory?
- Give you insights and recommendations to adapt your order and push-pull strategy for seasonal and one-time buys?
- Optimize your cash-to-cash order and inventory allocation process focused to maximize your profit?
- Focus on improving your business performance as a top priority?

Get that and more with the 4R collaborative planning team.

Why 4R PaaS?

√ 4R has provided and optimized this service in collaboration with our solutions since the company was founded...it is in our DNA!

√ Certified analytical expert planners guide you towards a fast ramp-up, quick results, and continuous improvement and optimization.

√ Alerts to supply chain issues and real-time adjustments free up clients to focus on more important strategic decisions and activities.

√ The in-house employee management cost and burden are removed from your business.