



Intelligent Inventory Optimization

CONVENIENCE RETAILING

Keep your “convenience” promise and stay competitive.

Convenience Stores of CHOICE

Convenience retailers are constantly looking for ways to remain "convenient" for customers and stay ahead of competitors. Over the last few years, c-stores have adopted new technologies and product lines to adjust to changing consumer needs and expectations.

Technology trends, like cashier-less checkout, app-based ordering and payments, emerged to help c-stores adjust to changing consumer expectations. Many convenience retailers now offer fresh or prepared foods and quick service restaurants (QSR) to draw consumers and meet the demand.

These trends add complexity to an already challenging inventory forecast and planning process, specific to the convenience retailing industry.

Now as supply chain issues, labor shortages and inflation impact businesses, c-stores need innovations that streamline operations, open new revenue opportunities, and better manage the supply chain to keep customers satisfied and coming back.

Be the convenience store of choice, not a store people only enter if they happen to pass by.

TRENDS	CONSIDERATIONS	RESOLUTIONS
App-based ordering and payments	<ul style="list-style-type: none">• Capture the huge volumes of rich transactional data produced by these systems• Integrate the data with that from traditional ERP & POS systems• Extract the value in using new data to improve better supply chain and merchandising planning decisions	<ul style="list-style-type: none">• Gain insights on market and consumer trends• Incorporate data rich analysis to improve planning processes by implementing a data synchronization engine that makes data available for AI-powered planning systems
Offering localized product mix	<ul style="list-style-type: none">• Consider matching product offerings to consumer buying patterns and product attribute to be much more specific to local markets and demographic areas• Create localized assortment plans that increase consumer demand and are operationally executable	<ul style="list-style-type: none">• Leverage AI-powered forecasting and modeling to optimize product assortments for individual store locations• Execute allocation and replenishment plans to keep assortment mix optimized• Utilize optimized vendor orders to keep store shelves stocked and minimize lost sales
Fresh, QSR items	<ul style="list-style-type: none">• Consider product shelf life and expiration dates for perishable products• Minimize overall product spoilage and wastage when making inventory planning decisions	<ul style="list-style-type: none">• Incorporate product shelf life into inventory assortment and replenishment plans• Leverage AI to streamline allocation and vendor orders to maximize freshness and minimize waste

Innovate Your Supply Chain

Manage Inventory as an Investment

Inventory is the largest investment inside the c-store footprint. Getting the most out of this investment requires that retailers match supply with demand. Demand and Rapid Replenishment along with Assortment Planning are strategies for optimizing inventory and providing customers with what they need, when they need it, where they need it and at the right price. The integration of advanced analytics, market insights, merchandising strategies and risk mitigation options are important components of these strategies.

The 4R Solutions for Convenience Retailing helps c-stores answer questions, like:

- › How can we predict and quickly react to the ever-changing customer demand?
- › What can we do to decrease the negative impact of supply chain uncertainty and inventory interruptions?
- › How should we balance many locations and rapid replenishment?
- › How do we estimate required labor workforce for periods of high demand and ensure staff accordingly?
- › What can we do to maintain control over escalating transportation and receiving costs?
- › Can we link new payment technologies with c-store inventory and ROI forecasts?
- › How do we apply inventory analytics to improve overall store operations?

The 4R Solutions for Convenience Retailing provides:

- › High-value processes and automation for optimizing supply chain and inventory management across five core functions: Demand Planning, Replenishment Planning, Assortment Optimization, Allocation Planning and Markdown Optimization
- › Cloud-based business applications, using Machine Learning and Artificial Intelligence analytics minimize inventory costs while improving in-stocks
- › Economic models that analyze demand patterns, inventory costs, margin, case pack size, lead times, and other supply chain parameters to determine optimal order quantity



One Predictive Engine

Take the weight off staff to predict (or go by their gut feeling) what is needed at every store location, warehouse or distribution center.

4R One Predictive Engine (OPE) leverages AI and Machine-learning to create a single source for demand forecasts. 4R OPE guides inventory planning processes to deliver a profit-optimal improvements across supply chain and merchandising decisions.



Profit-optimized Inventory Planning Processes

Demand Planning

Identify true demand, utilizing AI and machine-learning, and generate more accurate forecasts, driving more accurate upstream and downstream processes that maximize profitability.

Vendor Order Optimization

Enable buyers to make informed decisions on buying requirements when executing demand, replenishment and allocation plans.

Replenishment Planning

Enable multi-echelon inventory management that is guaranteed to maximize profit across all channels, reduce inventory carrying cost and deliver superior customer service.

Markdown Optimization

Maximize revenue and achieve merchandising goals each season by recommending the optimal timing and depth of end-of-season and end-of-life markdowns.

Allocation Planning

Allocate the right amount of inventory to the most profitable locations at the right time, minimize stranded end-of-season inventory and reduce the need for future markdowns.

Assortment Optimization

Optimize product offerings at each store to meet customer preferences and drive revenue growth through data-driven insights, resulting in improved customer satisfaction.

Supply Chain Planning as a Service

Let 4R Harness the Power of AI/ML Planning for You

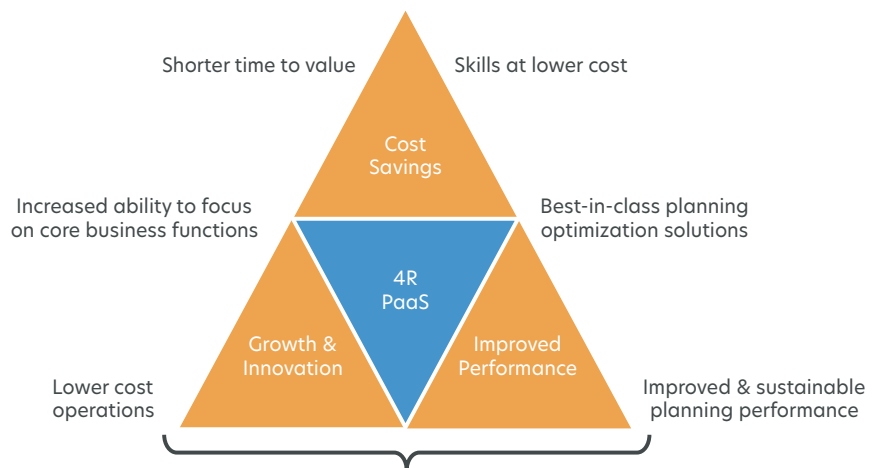
4R Planning as a Service (PaaS) helps companies achieve positive results by building optimal demand plans within the organization and across trading partner channels and relationships.

PaaS is an ongoing services delivery model enabling a one-stop-shop for supply chain planning services. 4R offers a very predictable and stable monthly subscription approach that provides greater elasticity and agility. The 4R experts who built the best-in-class AI-powered solutions will run it to maximize overall business efficiency and ROI.

4R PaaS approach is proven to drive revenue growth, reduce costs and improve capital efficiency.

Why 4R PaaS?

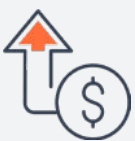
- ✓ 4R has provided and optimized this service in collaboration with our solutions since the company was founded...it is in our DNA!
- ✓ Certified analytical expert planners guide you towards a fast ramp-up, quick results, and continuous improvement and optimization.
- ✓ Alerts to supply chain issues 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.



PROVEN ACHIEVED AND SUSTAINED BENEFITS

Product Availability	➔	10-30% reduction in stock outs
Inventory	➔	5-20% increase in inventory turns
Obsolescence	➔	20-40% reduction in obsolete inventory
Operating Costs	➔	10-30% reduction in operating costs

Does your current supply chain team and solutions achieve these types of business results?



**INCREASE SALES
BY
12-18%**



**INCREASE PROFIT
BY
6-10%**



**REDUCE INVENTORY
CARRYING COSTS BY
2-8%**



**REDUCE
STOCK-OUT BY
14-25%**



**REDUCE
MARKDOWN LOSS BY
12-20%**

**4R benchmarking results from 40 clients*



Intelligent Inventory Optimization Solutions

Why Choose 4R?



The 4R Advantages

- ✓ Integrates with and compliments your Execution Systems, providing a strategic path off of existing spreadsheets and basic planning systems
- ✓ Unifies the data into "One 'Predictive Engine' for supply chain analysis across planning processes
- ✓ Delivers Best in Class Planning Process Modules
- ✓ Provides outsourced options, which eliminate the for large capital outlay, shifting costs to Pay-As-You-Go operating expenses.
- ✓ Provides services tailored for continuous improvement and customer success

4R platform and services have proven to help retailers meet customer expectations, improve profitability, reduce inventory, and empower employees - **some clients realizing \$6 million to \$265 million in incremental profit.**

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.

“We have recently been challenged with volatile and quick-changing demand patterns that can’t be modeled off previous years. We ask 4R for the best recommendations regarding how to resolve these cases and they always come through. Because of 4R, we’ve increased sales and profits, improved store in-stocks, decreased lost sales and reduced inventory investment while protecting margins. 4R’s solutions and people are instrumental in helping us grow our business.”

*~ Senior Executive
Current C-store Client*



PO Box 888 | Southeastern, PA 19399-9002 USA | +1 610-644-1234 | optimize@4r.ai | www.4r.ai