# 4R

**Intelligent Inventory Optimization**

# AUTO PARTS, TIRES, LUBRICANTS, AND SERVICE CENTERS

Achieve optimal merchandise availability at every location to maximize profitability.

# A sector going through **SOME CHANGES**

**The automotive aftermarket sector is considered an established one, but in a period of stagnation.**

Prior to the COVID-19 pandemic, the industry experienced fairly stable growth. However, like with other industries, the pandemic rvevealed supply chain vulnerabilities that have impacted the industry. Wholesalers, distributors and retailers struggle to respond to changing consumer behavior, spending and e-commerce preference.

Successful auto part locations provide a comprehensive range of tires and automotive parts at competitive prices, enabled by a **sustained supply chain and good inventory efficiency**. While the market is considered a mature one, many auto part locations and service centers still operate aging rigid legacy systems. They are vulnerable to disruptions and cause locations to struggle to adjust to the ever-changing industry drivers.

While the industry is projected to bounce back aggressively from recent setbacks, some companies will still struggle because of their legacy systems.

**In a $140-billion-dollar automotive aftermarket industry that's bouncing back, how do companies compete?**

**By strategically planning and replenishing the right mix and quantities to optimize parts availability at every location, enabled by a digital transformation.**

## What's happening?

- New car demand - slumping
- Number of vehicle registrations - increasing
- Average age of vehicle fleet - growing
- Average vehicle mileage - growing
- Demand for e-commerce/on-line auctions - increasing
- Consumer Confidence Index – lowering
- Fuel cost and regulation driving people to electric – declining
- Use of mass transit - decreasing

## Key success factors:

√ A cost-effective distribution system to keep stores well stocked

√ Control of distribution arrangements

√ A loyal customer base that increases profitability by creating a consistent revenue base

√ Sales staff with thorough automotive knowledge to answer customers' automotive questions

√ Establishment of brand names to satisfy customers prefer reliable and well-known brands

# Managing tire and spare parts inventories is **VERY CHALLENGING**

## When and what will break is impossible to know causing demand patterns to fluctuate extremely.

These fluctuations, combined with the lack of significant trend or seasonal patterns, render traditional time-series forecasting methods inaccurate. The large number of part-by-location combinations makes it impossible to manually create or even review forecasts for individual parts. Given all these challenges, auto aftermarket wholesalers, distributors, service providers and retailers need forecasting software that uses sophisticated algorithms engineered for fluctuating demand patterns. The result? Highly accurate estimates of safety stock, reorder points, and service levels, which lead to higher service levels and lower inventory costs.

4R provides stability to avoid wide fluctuations of inventory across the complex network. The AI-powered inventory optimization platform and planning as a service delivers predictive analytics that incorporate significantly agile read and react capabilities that quickly adjust to reflect ever changing customer demands.

# The 4R suite of AI-powered supply chain management and inventory optimization solutions and planning team are meeting the challenge of the industry's fluctuating nature.

**PLANNING AS A SERVICE**

**KPI PERFORMANCE METRICS AND REPORTING**

Assortment Optimization

Markdown Optimization

DEMAND

**ONE PREDICTIVE ENGINE**

Replenishment Planning

PLANNING

Vendor Order Optimization

Allocation Planning

## 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.

## 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.

## 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.

## Vendor Order Optimization
Enable buyers to make informed decisions on buying requirements when executing demand, replenishment and albcation plans.

## Markdown Optimization
Maximize revenue and achieve merchandising goals each season by recommending the optimaltiming and depth of end-of-season and end-of-life 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.

√ **Build customer satisfaction while maximizing profitability by optimizing merchandise availability across the entire supply chain and store and service center network**

√ Create end-to-end merchandising functions, processes, operating models including core merchandising, category management, and forecasting and replenishment aligned with industry best practices

√ **Design of a single source of truth for product information, inventory, product costing and reporting**

√ Deploy a better Merchandising function operating model with integrated department capabilities across the planning and buying departments and enhanced visibility across selling channels

√ **And more!**

# Supply Chain Planning as a Service

## Supply chain planning uses forecasts to develop demand plans that optimize inventory levels and their allocation across locations.

Successful supply chain management organizations have a holistic view of the supply chain and successfully get the right products, in the right quantities on the right shelf, at the right time, in every store.

If supply chain planning is the process that manages the supply needed to support demand requirements, then Supply Chain **Planning as a Service** is an outsourced solution and service model, where external experts execute all aspects of the process and help companies achieve operational excellence. Supply Chain Planning as a Service helps companies gain control of their supply chain through leading practices and expertise.

Planning as a Service creates supply chain organizations that manage agile and sustainable supply chains. It puts the right people, processes and tools in place to achieve **Supply Chain Operational Excellence.**

## THE 4R MODEL OF EXCELLENCE
Building a Successful Supply Chain Operation Requires
5 Fundamental Operational Excellence Practices

**Standardization**

**Control**

**Metrics & Reporting**

**Risk Management**

**Stability**

# Let **4R HARNESS THE POWER** of AI/ML planning for you

## 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.

**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.

# Succeed with 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 helps businesses in the tire, auto parts, lubricants and service center sector drive transformational change through AI-enabled technologies and Planning-as-a-Service.*

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.**

## Are you achieving these type of benefits* for your business?
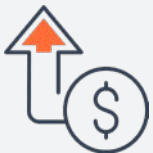
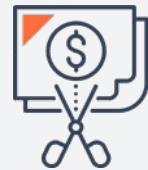**INCREASE SALES BY 12-18%**

**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**