



RETAIL SECTOR

OPTIMIZE MULTI-TIER (STORE & DC-LEVEL) INVENTORY POLICIES AND PURCHASING TO INCREASE PROFIT & AVAILABILITY

Most successful retailers have already enacted serial improvement initiatives to decrease costs without sacrificing customer service. In many cases, additional cost reductions prove unsustainable given the need for significant manual planning efforts, expediting, risk of customer dissatisfaction or some combination thereof. To unleash the next level of improvement, scalable multi-tier optimization methods are required that consider a comprehensive set of parameters, costs, & margins across the enterprise. These techniques cannot be emulated manually or in '2-dimensional' procedures like Excel, ERP, or Min/Max/ROP-oriented rule-based procedures.

Since its inception over 40 years ago, GAINSystems has consistently focused on optimization-driven innovation in its solutions and management methods. Our product, GAINSTM (General Adaptive INventory Solution) is a direct result of that focus. GAIN is a leading edge planning and optimization solution that provides companies with dynamic, profit-optimized inventory policies and replenishment plans. Based on such profit optimized policies and plans, executives are able to document the following in addition to any improvements from prior initiatives:

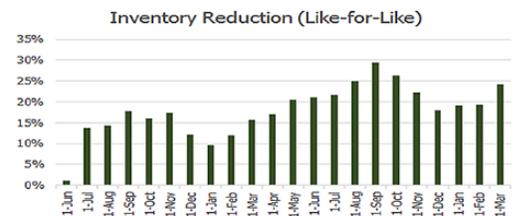
- ▶ 10-30% decrease in inventory / working capital requirements & spoilage/obsolescence
- ▶ 60-80% improvement in customer service levels and dramatic reduction in stockouts
- ▶ 5-10% growth in market share due to improved service levels
- ▶ 2-4% increase in pre-tax profits

GAINSTM Retail Success



Officeworks is Australia's largest retailer of office supplies and stationery carrying 27,000 items in 160 stores. In looking to improve off the shelf product availability and increase profits, they implemented the GAINSTM Inventory Optimization solution. The results:

- ▶ Within 12 months of Go Live, inventory in Warehouses and Stores was reduced by 20% while off the shelf availability increased 15%.
- ▶ Significantly reduced planner and inventory management workload while dramatically.
- ▶ improving data integrity.



Hillman distributes some 40,000 SKUs to 15,000 retail stores through providing hardware products that are stocked in franchised merchandising units. Through its national store service network, Hillman provides ongoing refill service and customized planograms to its franchisees. By implementing GAINSTM for Inventory Optimization, they were able to:

- ▶ Reduce Finished Goods Inventories by 18%.
- ▶ Increase off the shelf SKU availability from 96% to 98%.
- ▶ Synchronize inventory policies and replenishment plans on a world wide basis.
- ▶ Improved global inventory turns by 20%.

Profit Optimizing the Retail Chain

“Through GAINS inventory optimization support, we were able to reduce inventories and eliminate a warehouse while simultaneously increasing our turns and customer service levels. GAINS enabled us to achieve service levels with significantly less inventory than our ERP tool did.”



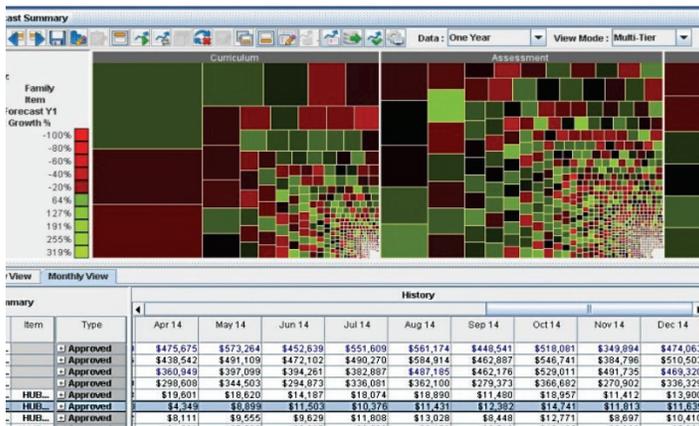
– Vice President, Operations

Examples of GAINS™ Distribution Optimization Capabilities

Demand and Supply Analyzed Continuously

GAINS is capable of assessing the significance of demand or supply changes in near real time. It dynamically determines which changes have a material impact on the company’s ability to achieve targeted customer service levels for each and every order. Where stockout or surplus is likely, GAINS dynamically suggests revised inventory policies and/or replenishment plans that ensure customer service levels are achieved at the lowest total cost.

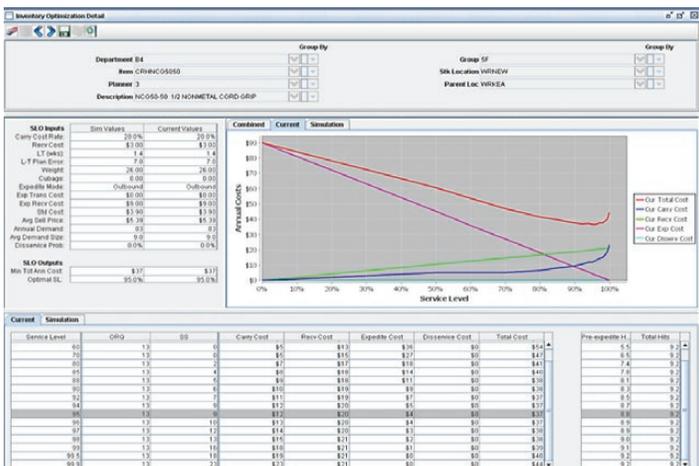
Forecast Summary Screen (with Treemap visualization)



Store-Level Inventory Optimization

GAINS dynamically determines where each SKU should be stocked, at what Service Level, and the quantity to stock (facings &/or total rows) to ensure that maximum profit (minimum cost) is achieved considering a comprehensive set of costs (e.g., transportation costs, handling costs, holding costs, expiration risk, lost line margin, lost order/‘basket’ margin, expediting costs, etc.).

Inventory Optimization Screen



Optimized Supply/Purchase Planning

GAINS dynamically optimizes supply planning into the supply/DC network supporting the retail locations. This includes multi-channel fulfillment planning (i.e., ‘clicks-&-mortar’). GAINS evaluates the costs and risks of multiple supply scenarios to ensure the targeted service level is sustained. This includes such tactics as SKU re-distribution from another location, how to most-optimally meet vendor minimums &/or rebate thresholds, determining when it’s optimal to cross-dock directly to the POS location, expediting, ‘filling-in’ availability gaps from alternative vendors, utilizing surplus substitute product, etc.

Optimization Capabilities Only GAINS Provides

- Dynamic, Scalable Demand Forecast Model Selection** that tests for plausibility and accuracy to provide an objective demand plan baseline on a massive scale (versus processes limited in sophistication in order to scale). This is complemented by Leading Indicator Analysis (see 4 below).
- Dynamic Analysis of Supply and Demand for every SKUL** (SKU by Location) across the enterprise that considers all error sources including the variability in supply to the DC, store-level delivery cycles, & user variance from plan. Only through this comprehensive approach can precise Service Level attainment be achieved (most alternative approaches over-shoot for most items and undershoot for some leading to excess cost). The goal is to attain exactly the cost-minimizing or profit-maximizing Service Level, not more or less.
- Profit-Optimized Inventory Policies** (e.g., Replenishment Order Sizing and Safety/Service Stock at the DC and Facing/Target Inventory Optimization at the Store) calculated at the location/store-level, considers total annual cost, delivery cycles, comprehensive error, optimal availability levels (given margin and ‘basket’ pull-through), and other relevant dependencies (e.g., substitutes).
- Leading Indicator, Extrinsic Variable, and Viability Analysis** to ensure forecasts and plans are not just a “look in the rear view mirror”; e.g., store-level POS trends, local promotions, product placement, etc.
- Integration with Merchandising to optimize** around shelf/display stock requirements while significantly fine-tuning **store-level policies** by recommending inventory face swaps within a shelf, optimal back-room stocking (between deliveries), and optimizing total shelf-stock. GAINS does this while complying with store ‘type’ planograms.
- Automated and optimized replenishment planning** that determines the profit and service level optimum source for each replenishment (parent location, primary vendor, surplus location, alternate vendor, substitute, etc.). Purchase constraints and opportunities (e.g., bulk buy discounts or rebates) are dynamically analyzed in the generation of specific orders to meet or fulfill these parameters at least total annual cost given targeted customer service levels.
- Sales, Inventory, & Operations Planning (SI&OP)** that synchronizes plans across the enterprise and enables collaboration through dashboards, reports and mobile applications. Advanced data visualization techniques, such as treemaps, and robust simulation capabilities allow business stake-holders to understand tradeoffs and risks.

To learn more about how GAINS can Profit Optimize your supply chain plans and policies, email us at ProfitOptimize@GAINSystems.com or call our Business Development Department at 872-206-8500.

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