

Consumer Goods Solution Series

Network Design & Optimization Planner™

Trade Promotion Optimization Planner™

Cost-to-Serve Planner™

Integrated Business Planner™

THE BRIDGE BETWEEN PLANNING AND FINANCIAL PERFORMANCE



**RIVERLOGIC**

# NETWORK DESIGN AND OPTIMIZATION PLANNER™

Product Data Sheet

## Integrated Planning and Optimization for Consumer Goods Companies

River Logic delivers the first integrated suite of solutions specifically developed to optimize planning, decision support, and performance management across the value chain.

### Network Design & Optimization Planner™

Network planners and supply chain finance personnel have traditionally incorporated heuristics when making performance oriented decisions; particularly those decisions pertaining to network design and long-term capacity. This approach, often supported by assumption-based technologies, was adequate when supply chains were primarily linear entities.

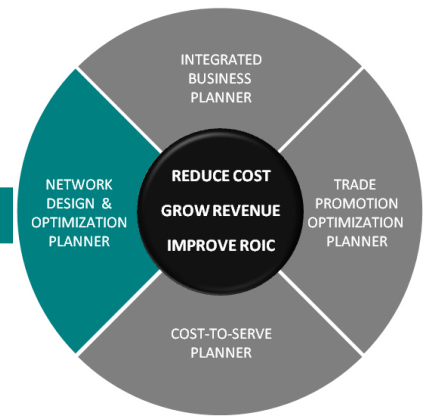
Extended supply chains [or value chains] have become highly complex operations with intricate relationships that cross departmental boundaries – and in many cases – global boundaries. The value chain, which behaves in non-linear fashion, is directly influenced by capacities, throughput, contracts, and regulatory constraints, as well as managerial decisions such as policies and targets.

In addition to managing increasingly complex relationships, supply chain personnel face unprecedented volatility in demand and input prices. Add in SKU proliferation, shifting consumer behaviors, and the influx of account specific programs, and it's easy to see why 'rule-of-thumb' or historically-driven assumptions are no longer effective.

Supply chain professionals need new solutions capable of modeling these non-linear activities and the relational causal impacts. Non-linear systems drive cost behaviors. This includes fixed costs and variable costs that may be incurred by unit, case, hour, and shift. Cash flow is driven by revenues, promotional activity, operational costs, working capital changes, investment allocation and taxes. Network personnel need the ability to quickly conduct **cost/benefit trade-off analyses** in order to accurately optimize network performance to financial outcomes, as well as balance network flexibility, growth, profitability, and cash flow.

**River Logic's Network Design & Optimization (NDO) Planner™ solution empowers supply chain personnel to optimize their networks by fully integrating financials with an accurate representation of the network.** In addition to advanced analytics and what-if scenarios, NDO Planner™ provides optimization that considers financials as objective functions and as constraints. In doing so, decision-making can be optimized from multiple perspectives including:

- Long-term Capacity Planning
- Network Configuration
- Capital Expense Allocation
- M&A Evaluation
- Long-term Cash Flow Forecasting



### CONSUMER GOODS SOLUTION SUITE

River Logic's suite of solutions enables Consumer Goods companies to improve performance by integrating and optimizing planning and decision-making across the value chain in order to:

- Reduce cost
- Grow revenue
- Improve ROIC

#### Network Design & Optimization Planner™

Supports long-term strategic planning by finding the financially optimal answer to capital expense, network design, and sourcing alternatives.

#### Cost-to-Serve Planner™

Quantifies the cost of alternative customer service choices and their impact on customer cost and inventory to better align charges and allowances with customer negotiations to create win-win strategies.

#### Integrated Business Planner™

Integrates financials with S&OP to optimize the Supply Plan and demand-shaping, based on financial metrics, and identifies the most profitable products, activities, and processes.

#### Trade Promotion Optimization Planner™

Enables corporate and field planners to optimize trade budget allocation and customer trade calendars to maximize share, revenue, and profitability objectives.

NDO Planner™ provides multi-dimensional [composite] what-if analyses that enable users to quantify the impact of their planning decisions from both operational and financial viewpoints. NDO Planner™ goes beyond traditional operational-oriented solutions by providing the full financial impact decisions have on the P&L, Balance Sheet, Cash Flow Forecasts, and NPV analysis.

## Benefits

Reduce COGS by 1-3%

Improve Working Capital by as much as 40%

Improve NPV of Capital Expense by 25-50%

## Network Design & Optimization Planner™ Functionality

### Long-Term Forecast Using the Microsoft® Platform

- Extended statistical forecasting to cover strategic planning horizon
- Judgmental and exception management
- Uses Microsoft Excel® and/or simple web-based dashboards and reports

### Network & Financial Planning

- Create strategic base plan by integrating capacity, financial, and capital allocation plans
- Optimize base plan to maximize profit, minimize costs, or to deliver the highest Net Present Value (NPV), by using financials as inputs and objective functions
- Identify relevant constraints as well as quantify the value of removing or relaxing the constraints through unique, marginal contribution and opportunity cost analyses
- Benefit from River Logic's constraint-based modeling engine (Enterprise Optimizer®) which calculates detailed cost from the ground up, and includes: demand, supply chain process, contractual obligations, taxes, and forward-looking constraints

### What-If Analyses

- Users collaborate on single or multi-dimensional (composite or multivariate) what-if analyses to evaluate and optimize decisions from an integrated, system-wide perspective
- Integrate Cost-to-Serve (CTS) and Integrated Business Planning (IBP) scenarios, including new customer delivery methods, supply plan constraints, and marginal opportunities for key resources
- Easy-to-use reports and dashboards allow scenario comparison and visualization of results

## Network Design

- Optimize network configuration and sourcing policy
- Quantify cost, working capital, and customer service trade-offs

## Capital Expense & Capacity Planning

- Optimize capital expense allocations based on NPV, ROI, or total profit
- Leverage IBP to identify the value of de-bottlenecking supply plans
- Optimize long-term capacity plan based on capital availability and strategic requirements
- Quantify trade-offs including in-house versus outsourcing, utilization versus flexibility, etc.

## Strategic Analysis

- Evaluate M&A opportunities including network consolidation, optimization, and synergy potential
- Understand full financial and operational impact of negotiations with strategic suppliers and customers

## Financial Planning

- Forecast capital expense requirements
- Forecast long-term cash flow

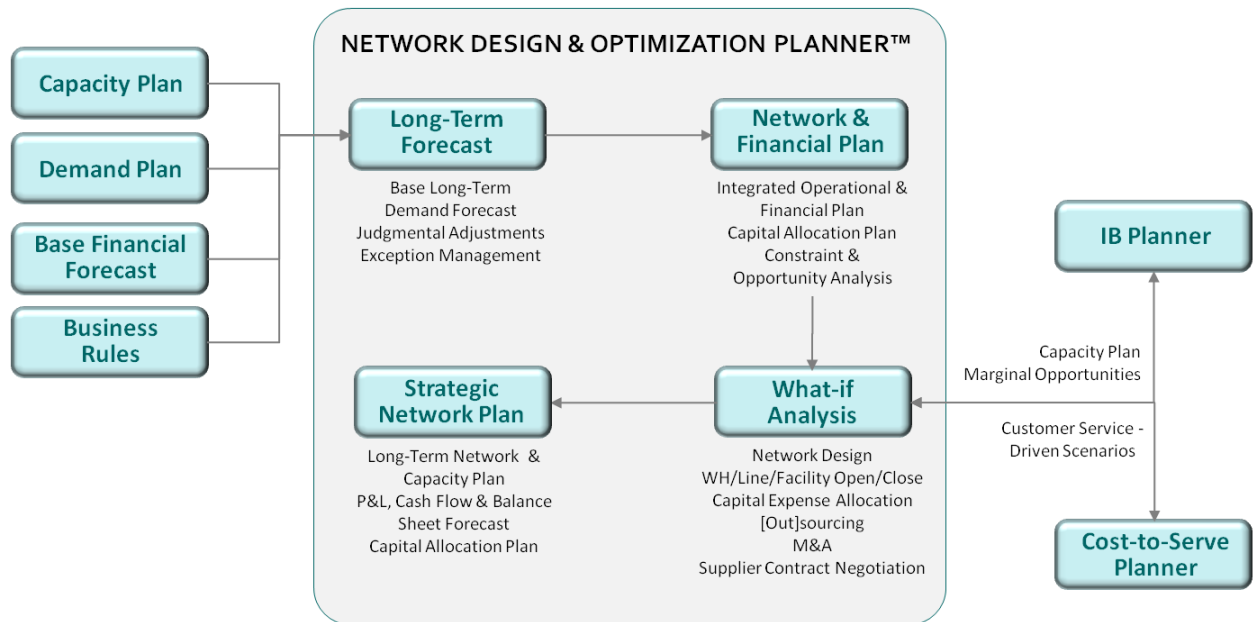
*"River Logic's solution includes all elements of demand, supply, and financial analysis in relation to the business goals and strategy... leading to significantly higher financial and operational performance."*

- Nari Viswanathan, Research Director  
Aberdeen Group, A Harte-Hanks Company

## Strategic Network Plan

- Plan administrators publish the Strategic Network Plan once the what-if analyses have been completed and the company has reached consensus (plans include network design, long-term capacity, capital allocation, and financial forecasts)
- The Strategic Network Plan also includes advanced analytics that highlight the value of relaxing or removing network constraints, which support marginal IBP decisions as business conditions change.

*Network Design & Optimization Planner™ simultaneously integrates network modeling with full financial modeling to optimize decisions and provide unique insights into marginal improvement opportunities.*



For more information please visit [www.riverlogic.com](http://www.riverlogic.com) or contact us at [info@riverlogic.com](mailto:info@riverlogic.com)



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River Logic is the leading provider of integrated business planning and optimization solutions. The company, founded in 2000, has been routinely recognized for its innovation and its ability to optimize planning, decision support, and performance management in a single, holistic system. Recent accolades come from Gartner, Intelligent Enterprise, and the Supply & Demand Chain Executive 100.