RIVERLOGIC
Real decisions. Optimized.

INFRASTRUCTURE STRATEGY & CAPACITY PLANNING

Solutions Data Sheet

Strategic decisions require a process that combines the ability to analyze complex variables and evaluate scenarios for data-driven decision-making. With supply chain tradeoffs becoming more interdependent and manufacturing site changes shifting costs, managing capacity through intuition and excel spreadsheets is, simply put, risky.

Because it is critical for sufficient time coverage to plan operational capacity and allow for investments, infrastructure and capacity decisions typically take 18-36 months.

Infrastructure Strategy and Capacity Planning analysis identifies the best use of existing and potential capacity when comparing supply/capacity with demand changes across manufacturing and warehousing.

Capacity planning doesn't solely affect the traditional metrics, e.g., service levels, inventory, and cost. If done in context and with the right technology, it represents an opportunity to impact gross profit and provides a unique perspective on contribution margin. More broadly, capacity planning directly affects a company's ability to meet corporate and business unit objectives, such as growth, return on assets, and ability to meet sustainability targets and risk.

KEY DECISIONS:

- **Manufacturing Footprint**
- **Supplier Strategy**
- **Investment Allocation**
- **Long-term Capacity Optimization**
- **Greenfield Analysis**

VALUE IDENTIFIED:

↓ Operating costs
↑ Production capacity
↑ Return On Assets

QUESTIONS:

River Logic can address these industry questions with industry answers:

- How many manufacturing locations are required? Is it better to off-shore, near-shore or pursue local options? Where should they be located?
- How many manufacturing locations are required? Where should they be located?
- Make versus buy?
- What are the ideal supplier terms?
- How best to adjust capacity and labor requirements seasonally?
- What is the optimal allocation of capital to improve the footprint? Should machines be upgraded or replaced?
- What investments can increase the effective utilization of capacity, e.g., uptime, throughput, investments to reduce cost, greenfield, etc.?
- What is the trade-off between existing and circular economy approaches?

REAL WINS

PHILLIP MORRIS INTERNATIONAL

THE CHALLENGE:

Phillip Morris International's (PMI's) product mix is transitioning from traditional tobacco products to electronic formats. Across their network of 40+ manufacturing sites plus external providers, they needed to determine how to best use their resources. PMI needed to meet demand while maximizing the NPV within their existing assets and capital expense allocations.

We are talking payback in a couple of hours. The cost savings opportunities identified run into the hundreds of millions of dollars over the period examined.

Dr. Alexandros Skandalakis

– Former Director Global Manufacturing Capacity, Strategic Assets and Capital Expenditures at Phillip Morris International

THE SOLUTION:

River Logic built a Digital Planning Twin™ of the client's full value chain looking out 10 years in monthly periods. This representation included the key physical constraints, such as which raw material can supply a given region, plant throughputs, as well as revenue and fixed/variable costs.

The Digital Planning Twin™ also included forward looking financial statements including depreciation schedules, taxes, and capital expense budgets. The model enabled handling massive variability in sourcing decisions, asset allocation decisions, footprint extension and conversion decisions, to name a few.

PMI took data from multiple sources across 70 distinct input tables that comprised:

- fixed and variable manufacturing and distribution costs
- the location of the manufacturing sites
- machine and product specifications
- operating efficiency (OE)
- duties and taxes
- capacity by asset and format
- other important parameters defining the global manufacturing and product sourcing network.

THE IMPACT:

River Logic´s Digital Planning Twin™ enabled PMI to:

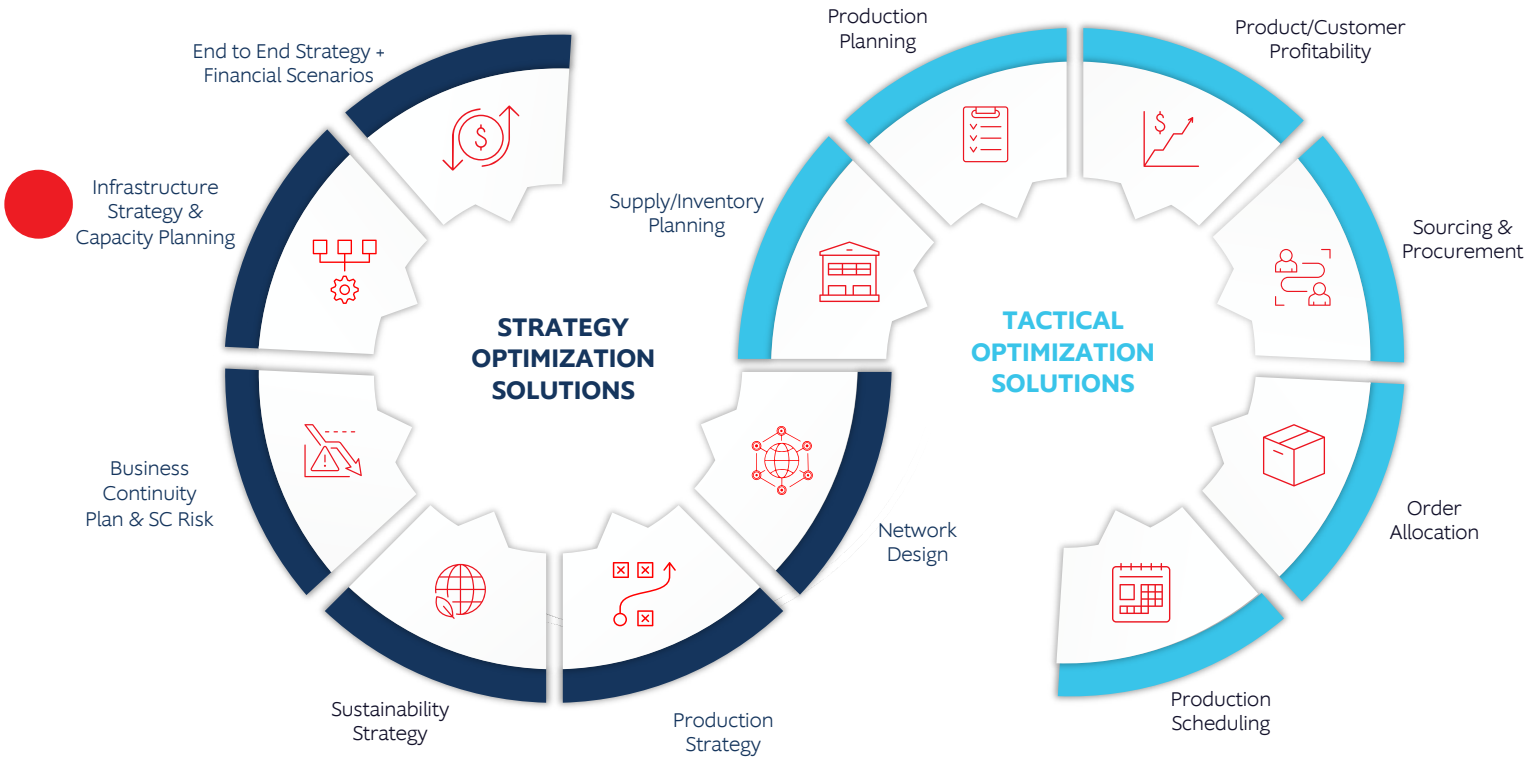
- Cost savings of over USD500M in the first six months of operation.
- Establish monthly versus annual process to capture opportunities in a long-range plan. Analysis and scenario formulation lead time reduced from weeks to days.
- Extend planning horizon from 2 to 10 years while accommodating increased complexity and scale.
- Established a roadmap of how to improve asset utilization down to the factory and machine level.
- Define optimum sourcing network, highlighting the fastest and most cost-efficient way to supply markets at a global level.
- Expand River Logic´s Digital Planning Twin™ to other areas of the business, like in-market distribution optimization, raw material purchases, etc.

THE RIVER LOGIC DIFFERENCE

At River Logic, we understand the industry. Knowing the market allows us to bring value. River Logic can address these industry questions with industry answers. The foundation of our technology is a Digital Planning Twin™ of your end-to-end business as it exists today – including all financial complexities, constraints, and KPIs. Powered by optimization, you can run unlimited strategic, tactical, and operational scenarios to balance complex trade-offs and maximize the value of your decisions.

River Logic enables conneced decision-making across the enterprise, empowering supply chain executives to have a stratgic view of the business that extends to the tactical and operational levels of planning.

CONNECTED DECISIONS



That is why we are: REAL DECISIONS. OPTIMIZED.
Get in Touch with Us, we are Happy to help!

LET'S SET UP A 15-MINUTE INTRODUCTORY CALL.

RIVERLOGIC

Real decisions. Optimized.

WWW.RIVERLOGIC.COM