Oracle Value Chain Planning
Strategic Network Optimization

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VALUE CHAIN PLANNING

Do you need to know what impact changing costs have on your sourcing strategy? Do you need to know what the real total cost of outsourcing is, including the impact on working capital and cash flow? Can you assess the impact of mergers and acquisitions on your supply network and capital asset budget? Do you need to know how you could react to a disruption in supply due to unforeseen events? Should you multi-source? What are the most profitable channels or products to invest in?

KEY FEATURES

- Constraint-based, cost optimized network design
- Visual, multi-tier supply chain representation
- Multi-currency support for global risk management
- Optimization of constrained resources and transportation modes
- Dynamic sourcing decisions
- Decision support for Capital Asset Management
- Strategic capacity allocations
- What-if analysis scenario management and interactive simulation
- Evaluation of new markets and required facilities
- Make, buy, and outsourcing decisions
- Robust reporting and exception management

KEY BENEFITS

- Design a more agile value chain
- Manage supply chain risk
- Profitably manage your capital asset decisions

Overview

Oracle® Strategic Network Optimization enables you to design your entire supply network with agility in mind. Today's rapidly changing global economics require you to be more responsive and the need to evaluate your supply network design more often is essential to enable your company to compete successfully. Not only do you need to design a more agile supply network, you also need to consider your hedge strategies in your design and be able to simulate the outcome of unpredictable events on your supply network flow.
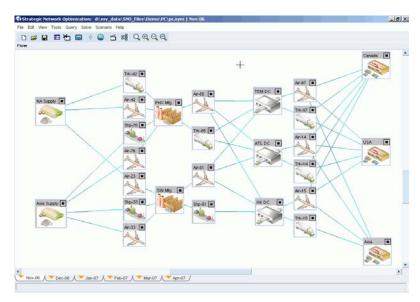

Figure 1. Strategic Network Optimization Workbench – Network Diagram

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Design more agile supply networks

When improving supply chain agility, you need to look at the long term, mid term, and short term aspects of agility. Short term means having the ability to quickly simulate and react to ad-hoc events, for example with tools like Oracle® Production Scheduling or Oracle® Rapid Planning. Mid term translates into reducing overall planning cycle time and the number or plans you need to synchronize across the supply chain nodes, which is supported in tools like Oracle® Advanced Supply Chain Planning, for example). Long term, you need to evaluate product mix and sourcing decisions, as well as design your network for overall throughput and efficiency with Oracle Strategic Network Optimization.

Oracle Strategic Network Optimization considers all of the complex costs and constraints that drive your network design and enables you to optimize your supply chain network design and decide on the best possible network configuration to run your business. You can model all nodes of your supply chain network and include all costs such as transportation, operating, sourcing, storage, and labor. You can also simulate the impacts of different demand scenarios, integration of new businesses and targeting of new markets, evaluate outsourcing decisions, decide which facilities to ramp-up or shutdown, and evaluate the impact of currency fluctuations. Oracle Strategic Network Optimization (SNO) generates the best sourcing strategy as an output which can be used for the downstream supply and inventory planning processes.

Reduce costs and mitigate risk through dynamic sourcing

Oracle Strategic Network Optimization determines optimal sourcing strategies that consider all sourcing decisions. SNO is the most effective tool on the market today to help you assess single versus multi source strategies to mitigate risk. It provides time-phased sourcing decisions on what facilities and suppliers should provide which products to which markets and what transportation methods and lanes should be used. For example, when evaluating whether to move production offshore, you can weigh the trade off between lower offshore production costs against the increase in transportation costs, working capital, and decrease in cash flow, and conclude that increasing local capacity is a better decision. Oracle Strategic Network Optimization considers all supply sourcing decisions including production, distribution, capacity, and labor. It recommends optimal sourcing strategies, selects optimal product-facility assignment strategies, and provides time-phased network design changes.

Increase profits through asset rationalization

Oracle Strategic Network Optimization also provides value in enabling you to make optimal capital asset management decisions. It considers all of the complex costs involved in making these decisions and provides you with controls on minimum or maximum changes per period to guide the solution to pragmatic recommendations. For example, closing a dozen distribution centers next quarter might be mathematically correct, but not practical to execute. SNO can help you to rationalize capital assets by determining the right number of assets in supply chain and identifying the best locations for fixed assets. It considers all asset costs including opening and closing costs, inflows from salvage, and fixed and variable costs. In addition, it enables you to plan the integration of new business supply chains from mergers and acquisitions, or manage the assets during divestitures.

Increase revenue with customer or product segmentation

When multiple products or customers are served from the same constrained assets it is necessary to determine which products should be produced and what demand should be satisfied to maximize profits within constraints. Oracle Strategic Network Optimization enables you to balance the needs of many customers in different channels where the variety of products and seasonal variations in demand cause fluctuations in profitability. It optimizes the throughput on the most critically constrained resources based on profitability by product family, where there are many products with different margins, to determine the most profitable mix to satisfy demand. As a result, you can better understand and optimize the profit structure of your supply chain.

Manage risk more effectively

When designing your supply network with agility in mind, you can more effectively manage and mitigate supply chain risk. Risk factors can be both strategic and tactical in nature. By proactively identifying the vulnerabilities in your supply chain that consider these risk factors, you can stay competitive in today's global changing markets. Oracle Strategic Network Optimization enables you to model and evaluate the impact of potential unplanned events, understand their impact, determine the most cost effective mitigation strategies, and formulate contingency plans. Examples are:

- Failures: suppliers, plants, warehouses, lines, transport, and port closures

- Costs: increases or decreases in cost of labor or resources

- Prices: increases or decreases in price due to competitive activity, market conditions, and currency fluctuations

- Capital investments: new purchases, capacity increases

- Disasters: hurricanes, earthquakes, terrorism impacts

For example, you need to decide ahead of time whether you have logistics contracts at both Seattle and Vancouver ports, in case one of them closes, or you need to determine who your alternate carrier is before your preferred global logistics provider – which everyone else uses – goes on strike.

Simulate changing business conditions

Oracle Strategic Network Optimization provides value with its flexible and easy to model what-if simulation capabilities that provide powerful decision support for making tough strategic business decisions. It enables you to answer tough questions like:

- Should I pre-build inventory or work overtime?
- Should I manufacture in-house or outsource?
- Should I single or multi source?
- How should I vary my safety stock levels over time?
- How can I rationalize my global assets when expanding?
- How sensitive is my supply network to sudden changes?
- How can I optimize my purchasing and transportation costs?

Oracle Strategic Network Optimization is an intuitive and easy to use tool with powerful features to make answering the tough questions easy.

Improve your Sales and Operations Planning process

Oracle Value Chain Planning improves your sales and operations planning process by enabling you to collaborate with your internal organizations and external trading partners on a common set of demand, supply and budget data. Oracle Strategic Network Optimization can provide the rough cut capacity planning (constrained forecast) to help you determine the most profitable use of your resources, as input to the detailed S&OP operations analysis and simulation process in Oracle® Demantra Real-time Sales and Operations Planning.

Enable executives to analyze strategic planning information

Oracle Strategic Network Optimization is fully integrated with Oracle® Advanced Planning Command Center to provide key supply chain decisions makers the capability to analyze output from Strategic Network Optimization, together with data from other Value Chain Planning products. Oracle Advanced Planning Command Center enables you to compare key performance metrics for your business strategies and alternatives as represented in your strategic and tactical plans.

VALUE CHAIN PLANNING — A COMPLETE SOLUTION

Oracle's Value Chain Planning solution enables companies to efficiently design, plan, and service their value chains from factory to shelf. Its componentized architecture enables you to start with any product and expand to other areas at any point in time. The Oracle Value Chain Planning architecture leverages the scalability and security of Oracle's Database and Fusion Middleware technology and can be deployed as a single instance with Oracle E-Business Suite, or integrated with other systems. Whether you implement one module or the entire product solution, Oracle Value Chain Planning enables you to share unified supply chain planning information across the enterprise so you can make informed decisions faster.