

WHITE PAPER

The Power of Anaplan for Supply Network Optimization



Anaplan

Imagine that a supply chain planner has 100,000 SKUs to manage, ten production facilities, five raw materials factories, and 100 distribution centers across the globe. That planner needs to know what to produce in order to minimize cost and maximize profit. They need to determine what distribution centers should serve certain customer locations, and, in turn, what manufacturing plants should supply those distribution centers. Each SKU could be produced at multiple factories or one, but what's the optimal choice? Factors that influence this choice include demand sources, shipping lanes, and cost-to-serve.

These are the decisions involved in supply network optimization. The end goal of supply network optimization is fulfilling global demand in the most efficient and profitable way possible. With millions of possible solutions and a huge impact on profit and loss, these decisions can make or break a company's success in today's competitive, fast-paced market. When the supply network is optimized, supply meets demand, waste is minimized, and service levels are consistently met, resulting in happier, more loyal customers.

Optimization—the key to your supply chain success

What is the optimization piece of supply network optimization? Optimization is a mathematical method applied to business processes to maximize the impact of decisions. It enables businesses to minimize costs and get the most out of existing resources. For example (as was explored in the opening paragraph), if supply chain planners use the power of optimization to determine the best possible combination of factories and distribution centers to guide a product from start to finish, profits go up, costs down, and efficiency increases.

With optimization built into the supply network, planners gain a competitive advantage by harnessing the power of automation to make complex decisions exponentially faster than any human alone could. Instead of countless hours spent poring over multiple spreadsheets and wrestling to integrate data from a plethora of data sources, optimization is in a single technology designed to empower planners to make complex decisions quickly and accurately.



Introducing Optimizer

Anaplan has partnered with Gurobi, an industry leader in optimization technology, to create a cutting-edge solution. Optimizer is built into Anaplan's cloud-based, in-memory, multi-dimensional planning platform, resulting in complex calculations taking as little as a few seconds to run. This creates an unparalleled solution—in mere seconds—for finding accurate answers to the most complex supply chain problems. With Optimizer, planners can provide value-based decisions to the business in record time and with ease.

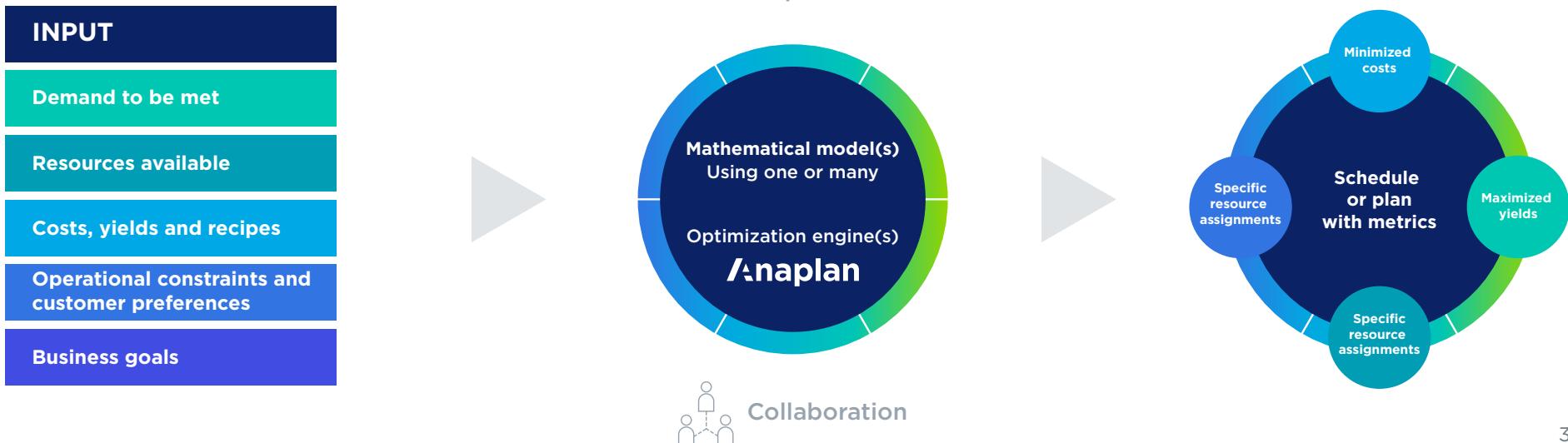
How Optimizer works in Anaplan

First, Optimizer helps generate an optimized plan based on a global demand forecast that is also input into Anaplan. Then, when the demand forecast is tweaked or updated, the plan can be re-optimized immediately, revealing potential shortfalls where demand can't be met using the current plan.

For example, plant production and distribution center constraints can be factored into the system. Transportation costs or issues can also be added into the equation, such as adjusting shipping lanes—e.g., perhaps one distribution center is only able to use American shipping agents, which affects how demand is met.

With all the internal and external factors that can affect the chain available within Anaplan, Optimizer generates a result showing exactly which items and how many of these items should be shipped from each plant to each distribution center. With all possible factors calculated into the equation, planners are able to be confident in the decisions they make for the supply chain.

The structure of optimization models



The Anaplan difference: Connected Planning

Connected Planning is a new approach to business planning that enables dynamic, collaborative, and intelligent decision-making by incorporating all relevant information from across the organization into a single cloud-based platform. A Connected Planning approach to supply network optimization means that all relevant data is modeled in a central platform, empowering businesses to make quicker, better-informed, and collaborative decisions that outpace the competition.

When managing supply network optimization, it is essential to ask “what if” and be able to process and consider millions of possible options. For example, if a planner saw that global demand couldn’t be met because of the existing plan’s shipping lane constraints, that planner could investigate alternative shipping lanes and see whether or not demand could be met with the potential changes. With Optimizer in Anaplan, that planner can also compare multiple scenarios side-by-side to find the best alternative that meets not only the demand but also the financial expectations.

With the unique capabilities of Anaplan’s Connected Planning platform, supply chain planners can run optimization scenarios that connect to the financial implications of each choice. Because the goal of supply network optimization is a solution that minimizes cost and maximizes profit, this connection between supply chain and finance allows for quick decision-making while prioritizing the overall value to the organization, rather than supply chain decisions based on volume alone.

Anaplan’s flexibility is unparalleled—each business unit can customize the platform to their own unique needs without having to rely on developers to write custom code. The Anaplan platform requires no custom coding or dedicated software engineers, yet still delivers a multi-dimensional, in-memory, cloud-based solution. Optimizer is incorporated directly into the platform, yielding near-instant results, unlike the potential delays that come with most integrated solutions.

With the power of Optimizer, finding the ideal supply network optimization solution to meet demand in the most profitable way is no longer a massive headache; that power and efficiency is put right into the hands of the planner.



About Anaplan

Anaplan is pioneering the category of Connected Planning. Our purpose-built software—powered by our patented Hyperblock engine—enables dynamic, collaborative, and intelligent planning. Large and fast-growing companies worldwide use our solutions to connect the people and data required for trusted plans and accelerated decisions essential to leading in their markets. Based in San Francisco, we are a privately-held growth company with 20 offices, 175 expert partners, and more than 850 customers worldwide.

To learn more, visit [anaplan.com](https://www.anaplan.com)

The Anaplan logo consists of the word "Anaplan" in a bold, dark blue sans-serif font. The letter "A" is stylized with a diagonal slash through it. The entire logo is set against a white triangular background.