Dynamic Supply Chain Planning Solutions from DecisionBrain
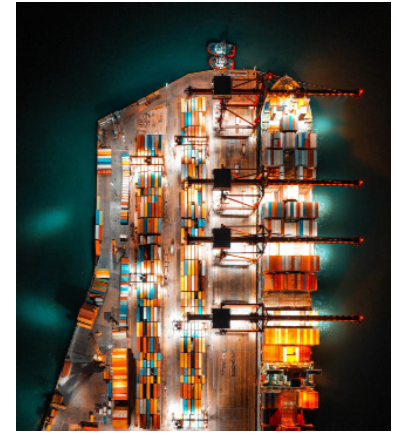
Software that empowers resilient and adaptable supply chain strategies.

In a world of increasing supply and demand volatility, economic uncertainty and business shifts, companies must make better and faster planning decisions while effectively balancing across financial and service level targets.

At DecisionBrain, we're helping supply chain leaders create resilient and flexible plans so they can embrace volatility for competitive advantage.

Solution Accelerators

DecisionBrain Supply Chain Solution Accelerators offer ready-to-use optimization models and data templates for common use cases. With 80% of the functionality needed for most use cases available out of the box, you can configure and deploy fully customized solutions in about the same time as pre-packaged applications.
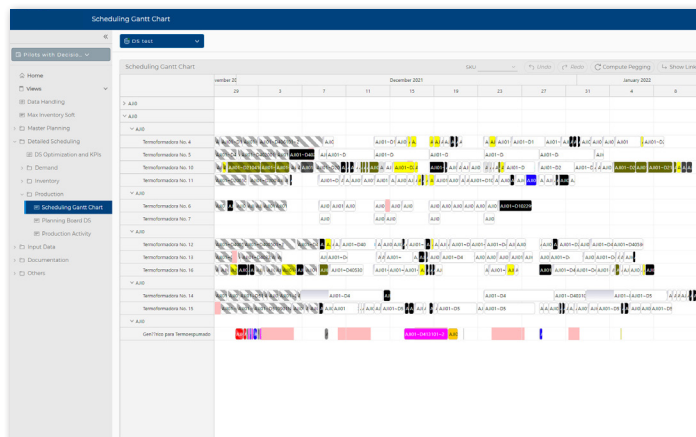
Key business benefits

- Increased operational efficiency
- Improved service levels, throughput and capacity utilization
- Phenomenal ongoing support
- Fast time-to-value

Strategic Planning → **Tactical Planning** → **Operational Planning and Scheduling**

- Strategic Capacity Planning
- Networking Design and Optimization
- Demand Planning and Forecasting

- Sales and Operations Planning
- Inventory Planning
- Production Planning
- Transportation Planning

- Production Scheduling

Production Scheduling

Strategic Planning

Strategic Capacity Planning: Evaluate the overall capacity requirements of the supply chain, taking into account long-term demand forecasts, capacity constraints, and service level objectives. Assess the impact of facility expansions, infrastructure investments, and outsourcing considerations on the capacity needs of the organization. Leverage advanced modeling and scenario analysis to explore different expansion strategies and their potential outcomes. Make informed decisions to optimize capacity utilization, enhance operational efficiency, and align the supply chain with long-term goals and market demands.

Strategic Network Design: Optimize the supply and distribution network structure to achieve the most efficient and cost-effective configuration or simply identify risks or top opportunities for improvement. Consider factors such as supply base location, manufacturing/warehousing locations, customer locations, capacity constraints, inventory costs, transportation costs, and market dynamics. Leverage advanced modeling and analytics to design an agile and responsive network that aligns with the organization's long-term goals. Identify optimal facility sizes, types, and locations to maximize operational efficiency, minimize costs, and enhance customer service levels. Drive strategic decision-making by visualizing network scenarios and evaluating their impact on key performance indicators.

Demand Planning & Forecasting: Analyze historical data, market trends, and demand drivers to generate accurate demand forecasts that drive production, procurement, and inventory decisions. Leverage advanced forecasting techniques and segmentation approaches to optimize demand planning and achieve better alignment with customer demand patterns and market dynamics.

Tactical Planning

Sales & Operations Planning: S&OP focuses on aligning demand/sales capabilities with operational capabilities and constraints to establish an integrated plan. The outcome is to balance supply, demand, and inventory. This process is supported with the ability to compare scenarios and provide information for respective functional areas to action.

Supply & Inventory Planning: Optimize inventory levels to balance customer service levels and cost efficiency. Set safety stock levels, define reorder points, and implement inventory replenishment strategies to avoid stockouts while minimizing excess inventory. Leverage advanced supply chain algorithms and analytics to align inventory buffers with demand and supply variability, ensuring optimal utilization of resources and effective working capital management.

Production Planning: Determine the quantity, timing, and location of production to meet demand and inventory goals. Assess the alignment between production capacity and demand at a high level, considering constraints such as capacity, compatibility, and lot size. Optimize procurement, sourcing, and material transfers to ensure timely availability of resources. Leverage advanced planning algorithms to create production plans that span weeks to months, synchronizing supply and demand while maximizing operational efficiency and minimizing costs.

Transportation Planning: Streamline route planning, load consolidation, and scheduling to ensure efficient and on-time delivery to customers. Leverage advanced routing algorithms and optimization techniques to optimize route selection, load consolidation, and scheduling, enabling you to meet customer expectations while maximizing operational efficiency.

Operational Planning and Scheduling

Production Scheduling: Create detailed daily or hourly schedules for executing production orders, optimizing the utilization of resources. Take into account real-time factors such as machine availability, labor availability, and material availability to ensure smooth and efficient production operations. Leverage advanced scheduling algorithms and real-time data integration to dynamically adjust schedules, respond to changing conditions, and minimize downtime. Achieve higher productivity and improve on-time delivery by synchronizing production activities with available resources in a responsive and efficient manner.

DecisionBrain™
Smarter Decisions. Better Results.

Custom-Fit Software from DecisionBrain

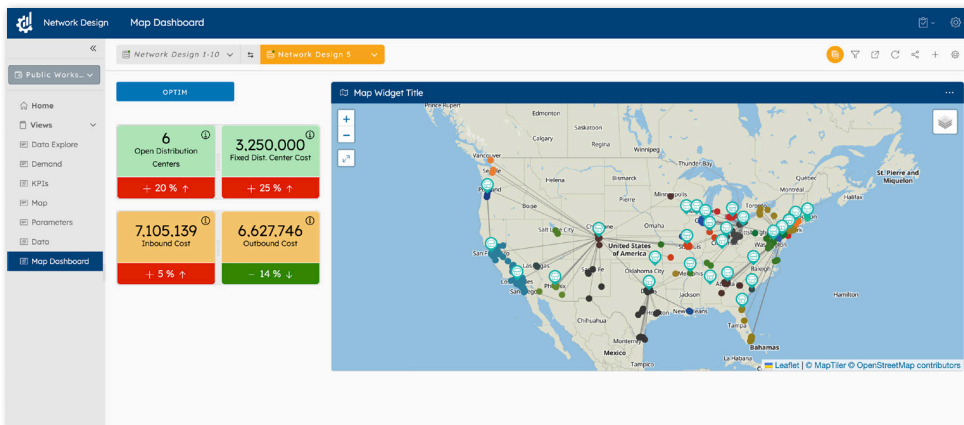*Your operations are unique. Your planning systems should embrace that.*

DecisionBrain software is your co-pilot in creating highly efficient strategic, tactical or operational plans and schedules. Harnessing the power of advanced analytics, machine learning, and optimization algorithms, the software guides you in finding plans that meet your business objectives while being extremely efficient with precious resources, like materials, equipment, fuel, inventory, people and space.

One-size-fits-all planning and scheduling systems often fail to address the unique characteristics and complexities of individual organizations, resulting in suboptimal planning outcomes. On the other hand, custom-developed solutions are costly, risky and difficult to maintain.

Network Design

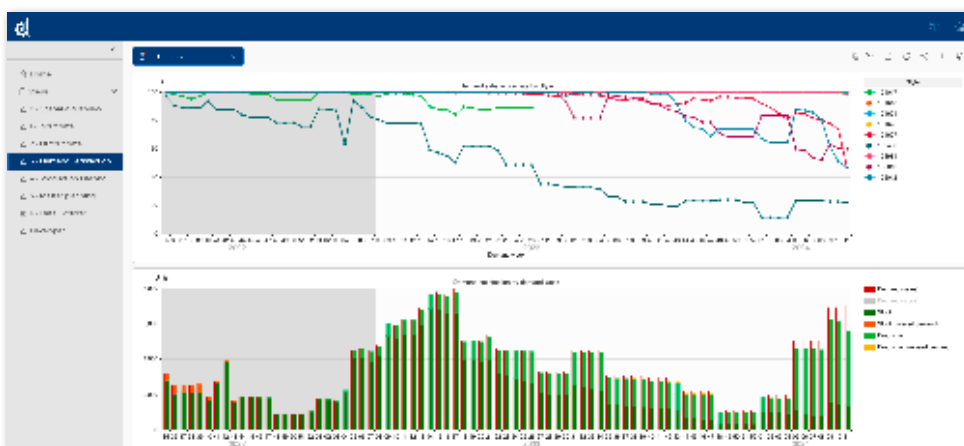
Demand Satisfaction

Key features

- Intuitive UIs and dashboards, fully customized for different users
- Flexible integration and deployment supports most ERP, clouds, MRPs & Enterprise Asset Management (EAM) systems.
- Platform supports various analytics, machine-learning and optimization solvers
- Flexible on premise or cloud deployment leveraging Docker/Kubernetes
- Supports strategic, tactical and operation time-horizons including real-time adjustments
- KPI-based scenario comparison & what-if analysis
- Configurable roles and permissions
- Prebuilt solution accelerators for common use cases
- 3-6 month implementation time on average

DecisionBrain's modular supply chain planning and scheduling solutions offer the best of both options. Built on a common decision support software platform, ~80% of needed functionality for most applications comes out-of-the-box. The remaining 20% is easy to configure so you get a 100% custom-fit solution from day one.

Contact us at https://decisionbrain.com/