TRANSPORTATION MODELING

MAKE BETTER DECISIONS, CUT COSTS AND CHALLENGE THE STATUS QUO

Companies that use transportation modeling from Manhattan Associates drive less miles and use less equipment to deliver the same results.[1]

Transportation modeling comes standard with Manhattan Transportation Management System (TMS). It enables the exploration of what-if scenarios, proposed network configuration changes, different routing options or the effect that flipping a lever or turning a dial will have on transportation costs. Companies that use modeling within Manhattan TMS have experienced a 5-10 percent reduction in miles and 2-5 percent better trailer utilization.

Using proprietary intelligence and scenario planning tools, Manhattan helps to remove complexity. Proposed models are validated for accuracy and robustness through sophisticated simulations using real-world data from the existing transportation network.

Armed with a new level of insight, the status quo doesn't stand a chance. Transportation modeling helps companies outmaneuver the competition by exploring advanced what-if scenarios backed by powerful optimization capabilities.

Manhattan Associates®

MAKE BETTER BUSINESS DECISIONS

Expanding numbers of customer locations, carrier and driver capacity restrictions, along with erratic fuel costs, hours of service changes, and shifting third-party rates all impact the bottom line. Using "averages" alone for modeling falls short when it comes to projecting the effects changing a policy has on complex transportation networks.

Features + Functions

– Create an unlimited number of scenarios for alternative network configurations and transportation policies
– Analyze real-world data and quantify the overall impact of change with realistic simulations
– Compare scenarios side-by-side
– Adjust a range of variables to arrive at the best outcome
– Factor in plans for opening and closing DC and store locations, disruptions, demand surges and holiday seasons to fine-tune service policies

DRIVE DOWN TRANSPORTATION COSTS

When approaching network capacity, how should resources be aligned? Where should a DC be added to get the most benefit? Transportation modeling provides answers to these types of questions with scenario-based optimization capabilities focusing on specific supply chain and network design problems.

Features + Functions

– Select new DC locations and optimize customer/store coverage for each DC to minimize cost while improving service levels
– Optimize and quantify the impact of servicing customers using different schedules and frequencies with private or dedicated fleets and for-hire carriers
– Streamline routing decisions by choosing static or dynamic routing, or a hybrid approach that uses both
– Determine which vendors and lanes should be converted from prepaid to collect
– Identify the best pickup and delivery time windows for vendors and customers to balance transportation costs and service commitments
– Perform fleet-size studies by considering a mix of asset and domicile considerations to effectively position a private fleet to meet demand

CHALLENGE THE STATUS QUO

While other tools look at financial impacts alone, transportation modeling goes further to deliver holistic analysis focusing on total cost, service level improvements and resource requirements. When a new transportation policy idea is proposed, simply model it to determine its full impact and benefits.

Features + Functions

– Set up a baseline scenario and evaluate current policies and operations holistically against it
– Build alternative models and review results using a next-generation user interface that includes scenario tiles, maps and other graphical reporting
– Perform what-if modeling through a combination of purpose-built strategic optimization capabilities and manual adjustments
– Fine-tune TMS optimization configurations and parameters to evaluate different carriers, modes and rates

LEARN MORE

See how grocers, specialty retailers, wholesalers, CPG companies, food manufacturers and more are using Manhattan's tools to make better transportation decisions, every time. Check out our collection of TMS resources at **manh.com/TMS**.

1 McCrea, Bridget. "State of TMS 2016."
  Logistics Management. Jan. 1, 2016.

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