

Case Study

Indian subsidiary of a leading global Diagnostics provider

Service(s) offered: **Supply Chain Consulting**

Sector/Industry: **Healthcare**



Warehouse Network Optimization for Rapid Point-of-Care Diagnostics Manufacturer

The client is a global leader in the point of care diagnostics market, with multi-billion-dollar revenues. Its fast, easy-to-use, and cost-effective tests are focused on the areas of infectious diseases (such as HIV, tuberculosis, malaria, and dengue, that can benefit people in remote care settings), molecular diagnostics, cardio-metabolic diseases, and toxicology.

The client's Indian subsidiary has a pan-Indian presence through 200+ distributors. The subsidiary is currently serviced by three Distribution Centres (DCs). These DCs are, in turn, serviced by imports and local manufacturing.

The client has engaged a logistics service provider (4PL) to handle supply chain operations from port to customer.

Challenges

The client was on an aggressive drive to expand its presence in India. Besides, it wanted to redesign its warehousing distribution network to increase efficiency, lower costs, and achieve higher levels of serviceability. The revision of tax procedures due to the introduction the Good and Services Tax (GST) was an additional complexity to consider.

Nexdigm was engaged to critically evaluate the efficacy of the Indian subsidiary's distribution network, identify optimization opportunities, and recommend operationally efficient network designs to deliver world-class service levels. The primary focus was on finding the right stocking locations, DCs to service existing distributors, and source nodes (plant or import ports).

Solution

Our approach considered qualitative factors for each possible location like the perceived ease of doing business, availability of quality resources, proximity to existing offices, and relevant ecosystems, to develop a software-driven solution.

We also considered non-qualitative factors including operations of ports, their ability to handle temperature-controlled shipments, information technology at each port, speed of clearances, traffic conditions of each location, ease of transportation for both outbound and inbound traffic, and distribution of product loading per warehouse in the light of the demand pattern, among a host of other factors.

The assignment was executed in a three-phased approach:

Phase 1

- Review and understand the existing network design through data collection and analysis
- Design of a baseline model in terms of lead times and operating costs

Phase 2

- Analysis of potential supply chain structure scenarios to identify prospective warehousing locations and lead times
- Consideration of qualitative factors

Phase 3

- Presentation of different supply chain structure scenarios based on the warehouse used for fulfilment, considering variables such as the logistics, distance, etc.
- Simulation of possible supply chain costs by minimizing lead times and costs

Other suggestions included reworking the existing transportation lanes, tracking outbound costs, negotiating a penalty clause with the 4PL partner for SLA slippage, and more robust demand planning.

- More accurate demand planning and optimal utilization of warehouse space to help realize cost savings of 16%
- Adjusting the current baseline model to redefine customers supported out of each warehouse, reducing the cost by 2% and increasing service levels by 6%
- Replacing current transportation lanes with other recommended partner to increase service levels by 7%
- Addition of a fourth warehouse at a strategic location and relocation of an existing warehouse, which resulted in an additional 27% savings in supply chain costs.

Value

Based on the opportunities available, Nexdigm made recommendations focussed on achieving higher efficiencies in cost and service levels through rebalancing of demand load and adding a warehouse to the network.

For more information on this case study, please write to us at:

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You can also visit our website to know how our services resulted in tangible business benefits:

www.nexdigm.com