

NETWORK SOLUTIONS

Latin America Hub Cuts Lead Times and Generates Cost Savings

An international telecommunications company needed to improve customer response time and reduce working capital in seven Central and South American countries where it did business. The company turned to Expeditors to demonstrate the value it would add as a provider.

THE OPPORTUNITY

Demand volatility and long transit times from suppliers in Asia meant that the company maintained high levels of safety stock in each country it operated in. Additionally, each country planned inventory independently and issued separate purchase orders to their supply base, which led to excess space and handling requirements in local markets, as well as overspending on transportation, and an unfavorable working capital position.

The study also showed that the highest product value originated from Indonesia with long production and ocean lead times. At any time, there could be anywhere from 12 weeks to 18 weeks of committed orders for supply that were either in production or transit. This led to a situation that drastically limited the company's ability to respond to customer demand and resulted in under or over supply in local markets with significant cash tied up in inventory.

THE SOLUTION

A primary objective was to decouple the long replenishment supplier lead time from volatile customer demand. To accomplish this, a regional stocking location, or hub, was proposed, that would position inventory closer to demand. A regional hub also creates a buffer by allowing demand to be aggregated across all countries and pooling demand

uncertainty, such that the peaks balance out the valleys. The system becomes more flexible and can adapt faster when lead time to the in-country DCs is reduced. Consequently, a reduction in lead times and smoothed out demand volatility allows network inventory to be reduced.

Panama and Colombia were considered as regional hubs. Following a thorough assessment, Colombia emerged as the best alternative. Colombia represented the greatest volume country and correspondingly highest merchandise value and achieved the greatest reduction in overall lead time. As a result, the net positive benefits from a Colombia hub were three times greater than Panama.

THE RESULTS

Locating the hub in Cartagena reduced overall lead time by seven weeks, which translated to a 62% improvement in customer response time. Over three years, the net positive savings exceeded \$4.2M – primarily from reduced inventory carrying costs even as distribution costs increased slightly. The solution also provided an ocean container consolidation benefit which generated an additional 10% in transportation savings.

This solution reflects the type of creative thinking and value generation the company anticipated when engaging Expeditors to strategically redesign their network and flows.