Moving smoothly from CST to GST. Are you ready…..?

Network Modeling in India

India logistics is undergoing a major transformation as the Central Sales Tax (CST) taxation system is replaced by a new federal Goods and Services Tax (GST) regime.

Companies selling in India now have the option to move away from a tax-driven network towards an optimized supply-demand chain – reducing logistics costs and working capital. To remain competitive, companies need to be equipped with a new network 'blueprint' specifying their new network structure and detailing the transition to it:

- ✓ *Where should products be manufactured and stored?*
- ✓ *What is the optimal number and location of stock-holding points (DCs, depots)?*
- ✓ *What transport assets should be employed and how can utilization be optimized?*
- ✓ *Outsourcing vs Insourcing?*
- ✓ *How to assign customers to stock-holding points?*
- ✓ *What is the best combination of stock-holding and non-stock holding (X-dock) points?*
- ✓ *What flexibility is built in to cater for changes in the business environment?*
- ✓ *What is the financial impact and justification for network development?*

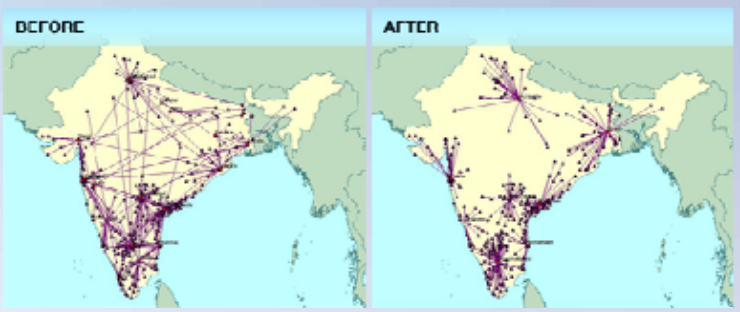
The LCA Difference

World class tools
LCA is the consulting partner of one of the world's leading Network Optimisation Software providers.

Barloworld Optimus

CAST

Functionality of CAST Network Modeling Tool



- **Map Displays: CAST** uses advanced GIS mapping functionality to visualise and validate the supply chain, thereby enhancing visibility & understanding of supply and demand data.
- **Centre of gravity modelling:** Used to identify new warehouse locations & warehouse configurations given supply and demand volumes by location.
- **Service Lead Time Analysis:** Used to consider service levels and transport lead-times across global road networks for each warehouse configuration tested.
- **Cost modelling & optimization: CAST** uniquely offers 2 solving approaches, a cost minimising heuristic and a Mixed Integer Programming Optimizer (MIPO). Both are used to evaluate & identify the 'preferred' or optimal supply chain configuration and to calculate the Total Cost to Market for each customer product group record.
- **Carbon Emissions Modelling: CAST-CO2** allows a user to calculate the carbon emissions of any given supply chain. This allows the comparison of cost, service level and CO2 across scenarios.
- **Reporting: The Report Generator** permits viewing of detailed PDF reports, customised exporting of results into Microsoft Excel, Access or CSV file format and interrogation of unit costs by supply chain component for each scenario in the Scenario Comparison Browser.

Practicality

LCA's differentiation is that we combine modeling proficiency with in-depth, "hands-on" experience of the Indian logistics environment. Our solutions are therefore realistic, practical and sustainable.

Teamwork

We work with our client's team to develop practical scenario models that clearly demonstrate the 'as is' situation and the impact of each viable alternative – bringing the clarity needed to select the optimal network for your business.

Beyond Network Modeling...
LCA is fully equipped to support our clients through the entire transformation of the distribution network.

- *Warehouse design*
- *Warehouse commissioning & start-up*
- *WMS & TMS implementation*
- *Interim & Project management*
- *Distributor network visibility and control*

Brief Case Studies

India

- Supply chain review (factory to distributor) to determine efficiencies that can be gained, & cost reduction opportunities
- Determine location & optimal number of CFA's
- Determine optimal future network model
- Increase service efficiency & customer flexibility

China

- Cost-to-serve analysis to underpin channel & network strategy development for supply to China's expansion markets.
- Pre-merger modeling of pan-China distribution networks to identify best integration approach.

Malaysia

- Cost-to-serve analysis to develop optimal distributive infrastructure for a fast growing consumer goods manufacturer.
- Network modeling to identify optimal build location for National Distribution Centre.

Indonesia

- Distribution network modeling to support decision making on new factory locations and investment justifications.
- Modeling of a national distribution network to evaluate a hub-and-spoke distribution option. Evaluation of trade-offs between inventory holdings, delivery lead times and transport costs.
- Network modeling to determine the most optimal logistics network for Jabotebak for a FMCG and pharmaceutical distributor. Evaluation of trade-off between service level and transport cost.

Contact us for a 'no-strings attached' initial meeting! www.lcalink.com

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