

HPCL Improves Distribution Efficiency with Honeywell's Supply Chain Solution



“With Honeywell’s supply chain planning solution, HPCL is now able to make better decisions with centralized supply chain planning. The result has been significant improvements in our ability to optimize efficiency of distribution and production across multiple facilities.”

Sanal Kumar, Senior Distribution Manager, HPCL

Benefits

Hindustan Petroleum Corporation Limited (HPCL) implemented Honeywell’s Supply and Distribution (SAND) tool to improve its inventory and distribution planning. The tool improved some key processes at HPCL and resulted in the following benefits:

- Cost savings by reduction in distribution and inventory related expenditures
- Improvement in operational efficiency by reducing unplanned shipments
- Better visibility of distribution network
- Better utilization of transport resources
- Better service levels by managing inventory at demand and storage locations
- Better support production and sourcing planning
- Reducing the need for frequent troubleshooting across the network

Background

HPCL is the second largest downstream petroleum company in India. HPCL has a supply and distribution network of over 100 terminals, several cross-country pipelines, aviation service facilities, LPG import terminals and bottling plants across India. The company also has arrangements with other companies for sharing infrastructure, serving over 11,000 retail outlets/resellers/distributors and numerous direct industrial consumers.



HPCL's refinery in Visakhapatnam, India

Challenge

Supply and distribution planning at HPCL was a challenge not only because of its large logistics network but also because of the limited capability of the planning tool used. The plans were created using Microsoft Excel, which is not fully equipped to handle the very complex data of planning distribution across 500 storage points, 17 cross-country pipelines, 170 local pipelines, 700 rail linkages and two refineries.

The data was scattered over various sites, and the tool relied on the experience and expertise of the user to make sense of the data.

Solution

The Honeywell team met with the marketing, distribution, operations and IT teams at HPCL to understand the process, and areas and scope of improvement. Based on the study, Honeywell proposed a new design of the supply and distribution planning system.

SAND, part of Honeywell's Advanced Planning and Scheduling suite of applications, was used to meet HPCL requirements. The SAND business model allows users to consider all the variables which affect their specific supply and distribution network, including multi-step supply availability and product demands, distribution system costs and limitations, and processing unit constraints and costs.

"Initially we had some hesitation around the ability to properly integrate the various sources in our supply chain, but Honeywell experts helped us understand the linkages and how the system could work together using one common supply chain planning tool," said Sanal Kumar, Senior Distribution Manager, HPCL.

As part of the implementation, all the master databases of distribution, tax logic and calculations were incorporated in a single central database and interfaced with SAND.

The Windows environment allows the user to modify the model with ease when business conditions change or when potential opportunities are identified for subsequent assessment of the ramifications by SAND.

The tool now indicates the optimal linkages based on global optimization, suggests the quantity to be uplifted from each source and the preferable modes of transport on each route. It also measures the fleet utilization and closing inventory, and indicates the constrained resources which, if addressed, can improve the plan.

"The ability of this solution to analyze thousands of possibilities and their implications with such precision will help us move far ahead in our supply and distribution planning than we ever thought possible," said Kumar.

Honeywell India continues to support the system to ensure sustained benefits and a lasting relationship with HPCL.

"Support from the Honeywell team has ensured we continue to maximize the benefits of our supply chain solution," said Kumar. "With full confidence, we can now determine the most cost-effective method for satisfying both our overall raw material needs and our customer demands. The investment has definitely paid for itself."

More Information

For more information on Honeywell's Advanced Planning and Scheduling solutions, visit www.honeywell.com/ps or contact your Honeywell account manager.

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