

Tredence created a forecast engine at day-DC level and a labor planning and scheduling tool which resulted in 4.7% reduction in labor costs



BACKGROUND

- Client: A global provider of water, hygiene and energy technologies and services
- Client wanted to optimize the labour planning at their DCs for daily operations in inbound and outbound logistics



Forecast Engine: Built a dynamic forecast engine based on ML techniques to sense trend shifts and adapt accordingly. The engine was empowered with forward looking data for improved predictions. It has ability to predict short term at day level and long term at month level for each DC in the network



Labor Planning Tool: Created a simulation tool to assess optimal labor requirement; permanent vs contract, for each DC based on predicted volumes. The tool takes input at weight, cases and pallet pick levels to accurately convert into labor requirement.



Dashboard Visualization: Developed an integrated Power Bi dashboard to ensure easy consumption of predicted volumes, track accuracy and ability to track and plan labor requirements over time

Average accuracy of **90%** at day level for all the DCs in the network.

Labor planning lead to **4.7%** reduction in labor costs by balancing between permanent and contract hires.