

Predict Manufacturing Lead Time To Manage Disruptions and Optimize Production



Ecosystem

Oracle Fusion SCM Cloud | Oracle Fusion Cloud Manufacturing

Metrics

The customer achieved faster implementation of preventive measures, resulting in a 20% improvement in on-time manufacturing completion of their work orders.

Industry

Manufacturing

Problem Statement

Customer operates multiple factories worldwide, producing various product types. Historically, their manufacturing operations have been affected by numerous factors, including Procurement Delays, Plant Shutdowns leading to Manufacturing Delays, Transportation Delays, Capacity Shortages, Demand Surges, War, Pandemic, Labor Shortages, Labor Strikes, Machine Shutdowns, Quality Issues, and other unforeseen circumstances.

They seek:

- A system capable of accurately predicting Manufacturing Lead Time for the entire Finished Goods list manufactured across all factories, considering new manufacturing demand as well as forecasted demand and accounting for all causal factors.
- A system to provide in-depth analytical insights to facilitate necessary business actions.

Solution Provided

- AI models were utilized to predict Manufacturing Lead Time across various scenarios.
- An execution workflow was implemented, enabling one-click operations for both real-time and forecasted demand.
- Deep analytics were employed to assess and act comprehensively.
- Business orchestration capabilities were incorporated to adjust estimated lead times within ERP systems for planning purposes.

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Outcome

- Ensure seamless data integration, preparation, treatment, analysis, and modeling.
- Enable real-time business decisions based on predicted values.
- Address marketing, business plan, make-to-stock, and made-to-order demands with efficient production planning.
- Proactively manage anomalies and disruptions.