



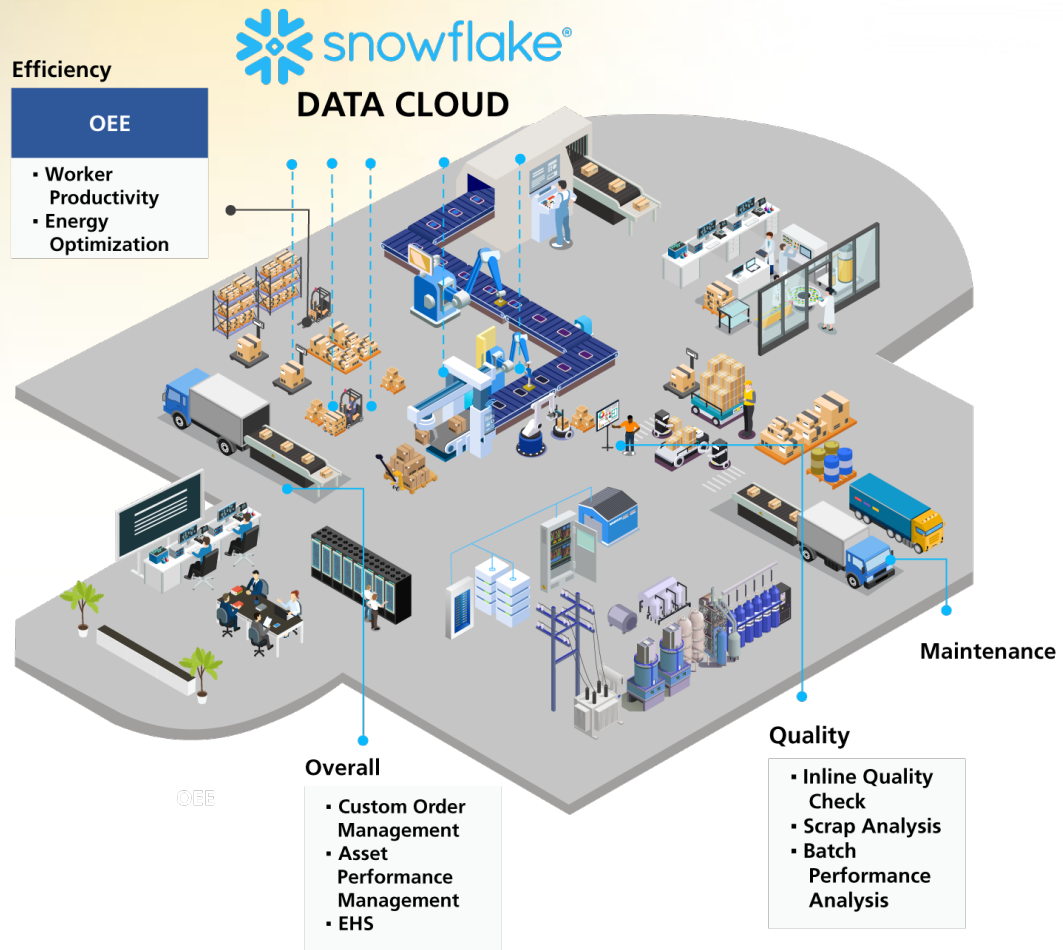
BROCHURE

# LTIMindtree Manufacturing NxT

Accelerate your plant data to plant intelligence journey


# Plant Data Acquisition, Processing, Integration & AI-Driven Persona-Specific Insights

Powered by Snowflake Analytics




The core of smart manufacturing lies in unleashing the power of this data and transforming it into valuable insights, with the objective of more efficient, agile, and sustainable manufacturing operations. While establishing operations visibility and KPI tracking is the foundation for enabling the larger goals, the challenge is to acquire real-time data from disparate data sources, including legacy systems, while managing the non-standardized KPI calculations across plants and providing a unified view for effective decision-making.


LTIMindtree's Manufacturing NxT is a bundled solution for data acquisition at the edge, data management, KPI monitoring, and analysis. It is a "fit for purpose" persona-driven solution, powered by Snowflake analytics, that helps stakeholders in effective decision-making. The solution provides seamless IT/OT convergence by ingesting both streaming and batch IT/OT data natively into Snowflake. With a plug-and-play approach, there is flexibility to add different modules incrementally based on the requirement.




Prebuilt connectors (OPC U/A, MODBUS, MQTT, DB) for data acquisition from plant applications and legacy systems




Industry-specific dashboards (automotive, industrial products, heavy engineering, life sciences & process) and use-case-specific data models




Low code/no-code platform with quick deployment and configurations




Advanced analytics using Snowflake Cloud data platform at edge and on the cloud




“Fit for Purpose” library of “Plug & Play” solutions



Predictive models for quality and maintenance automation via edge analytics



Real-time actionable insights



RCA enabled through snowpark on unified data in Snowflake

## Early value realization through OEE use case pilot

- OEE for 4 machines in 4 weeks
- Data acquisition from plant application as per template
- Pre-configured dashboard OEE, cycle time, downtime
- Reports (shift wise, monthly)
  - OEE – Actual vs. target
  - Downtime incidents
  - Cycle time actual vs. target
- Downtime incidents
- Cycle time–Actual vs. target
- Analytics powered by Snowflake



### MODULAR APPROACH

Start with OEE, scale to other KPIs



### ACCELERATED DEPLOYMENT

Solution deployment time reduced from months to weeks

### What is needed for pilot:

- Network infrastructure, including gateway
- Data availability as per DCC OEE template
- Remote access to system (SCADA & Gateway)
- Support for uninterrupted data flow
- Support for data integration



### SCALABLE ARCHITECTURE

Scalable Architecture to support scaling across multiple lines and plants



### COMPREHENSIVE SOLUTION

Data acquisition at edge, data integration and persona-based reporting

## Case Studies



Real-time battery traceability & battery lifecycle management for a leading battery manufacturer



OEE improvement of 10-15% for an American-Irish multinational power management company



Improved asset utilization and reduced inventory handling cost for a leading aircraft manufacturer by 10-15%

**LTIMindtree** is a global technology consulting and digital solutions company that enables enterprises across industries to reimagine business models, accelerate innovation, and maximize growth by harnessing digital technologies. As a digital transformation partner to more than 700+ clients, LTIMindtree brings extensive domain and technology expertise to help drive superior competitive differentiation, customer experiences, and business outcomes in a converging world. Powered by nearly 90,000 talented and entrepreneurial professionals across more than 30 countries, LTIMindtree — a Larsen & Toubro Group company — combines the industry-acclaimed strengths of erstwhile Larsen and Toubro Infotech and Mindtree in solving the most complex business challenges and delivering transformation at scale. For more information, please visit [www.ltimindtree.com](http://www.ltimindtree.com).