



Case study

## Integration of Engineering and Manufacturing Services with Digital Thread For Enhanced Process Efficiency



## Client

The client is a global semiconductor giant that offers cutting-edge hardware components to enable secure connections and infrastructure for a smarter world, focusing on research, development, and innovation in its target markets.

## Challenges

The client underwent a strategic merger to realize more significant economies of scale and potentially become the market leader in the specific semiconductor industry. The merger posed the following challenges.

Traceability or visibility of movement of devices manufactured across the two sites to meet market demands and streamline supply chain issues.



Integrating the IT and manufacturing landscape of the two companies for the correct data and information flow.

Legacy infrastructure at the new entity posed scalability challenges and higher maintenance costs, leading to a higher TCO.

## LTIMindtree Solution

LTIMindtree designed a business-based migration methodology based on prior experience for effective transition between various applications and systems across the new enterprise. This approach enabled complete harmony during the unification exercise as the business processes were sequentially migrated one by one.

LTIMindtree was able to help minimize application downtime during migration with minimum product configuration issues by assigning business-wise separate teams with defined tasks, thereby facilitating accountability.

- LTIMindtree commenced the transition exercise in a two-phase business-based migration plan. Based on criticality, a set of the business process were selected for phase 1 and the rest in phase 2. Each step included implementation and rollout for the assigned business process.
- With advanced capabilities in designing innovative solutions to automate business processes, LTIMindtree identified software and hardware configurations across the manufacturing and IT landscape of the merged entity.
- Implemented innovative manufacturing models to migrate data from the acquired company's front and back-end manufacturing applications onto the client's systems using software interfaces, providing a single view of equipment's assembly/test data.
- Centralized knowledge management and provided easy integration of data analytics with the removal of multiple data sources.
- Global Traceability and Real-time tracking were harmonized for devices manufactured across sites to bring better visibility.

## Business Benefits

- Reduction in OpEx cost with Centralized and Unified System of Record and improved device visibility.
- Lowered TCO and improved time-to-market with better collaboration achieved with standardized cloud-based PLM processes.



Integration of  
PLM processes.



Full utilization of  
factory data.



Faster  
time-to-market.



Unification of  
business process.



Decommissioning of legacy  
application and systems.

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