Case Study

Implementation of Enterprise Asset Management for Metro Rail in Indian City
Client

The Metro Rail Operation Project is the world’s largest PPP project in the Metro sector. The client is a major technology, engineering, construction, manufacturing and financial services conglomerate, with global operations.

With increasing commutation demands, the existing infrastructure in an emerging Indian city needed expansion. The project required automated solutions in order to successfully fulfill infrastructure demands, implementing asset management solutions.

Challenges

The Metro Rail project had multiple assets, which were under regular wear and tear. There were increasing complexities in maintenance and operations at many levels. The project required an integrated enterprise asset management solution with real-time dashboard to have holistic view of their assets.

Additional challenges were:

- Implementation of IBM-Maximo Asset Management including testing and AMS support
- Existing customer and new member engagement
- Multiple subsystems, operations departments and data sets for rail maintenance.

LTI Solution

LTI implemented its proprietary “RaiLnT Solution”, which is developed on IBM Maximo, with built-in IoT capabilities to address and surpass the project’s challenges. In this solution, Maximo was used to track location and asset hierarchy of Metro Rail Stations, Depots, Rail Infrastructures, Tracks, Via Ducts, Tunnels and Rolling Stock to manage all types of maintenance of the rail, infrastructure and facilities assets.
Implementation details:

- Integration with SAP
- Automation of service requests for railway subsystems via middle layer IIB
- Appropriate communication of schedule and deliverables, and rigorous follow-ups
- Acceptance enforced for Common Data Model
- Roles and responsibilities clearly charted and signed off by vendor and customer
- Real-time updates between source and destination
- Scale-up from point solutions to enterprise-wide deployment (distributed bus)
- ESB – Middle layer-based interfaces
- Complex and robust integration of seven railway subsystems (PTC (Positive Train Control), TCS (Traffic control system), COMMS (Communication), RS (Rolling Stock), BMS (Building Management System), Track and Depot) and SAP through ESB

Business Benefits Delivered

With LTI’s proposed solution, Metrorail was be able to:

- Efficiently track and manage rail assets and location data.
- Operational and safety decisions with a 24×7 real-time view of compliance.
- Adherence to reduce flaws in automation.
- Efficient tracking of labor, materials and tools charges by linear measure.
- Optimized asset efficiency and inventory levels.
- A complete suite of Business Intelligence and Reporting to ensure correct information and optimal management of assets.
Enabling change characteristics of a linear asset, using dynamic segmentation.

Substantial reduction in administrative manpower.

Safety of assets and labor maintained by PTW(Permit To Work) application.

LTI (NSE: LTI, BSE: 540005) is a global technology consulting and digital solutions company helping more than 420 clients succeed in a converging world. With operations in 32 countries, we go the extra mile for our clients and accelerate their digital transformation with LTI’s Mosaic platform enabling their mobile, social, analytics, IoT and cloud journeys. Founded in 1997 as a subsidiary of Larsen & Toubro Limited, our unique heritage gives us unrivaled real-world expertise to solve the most complex challenges of enterprises across all industries. Each day, our team of more than 30,000 LTItes enable our clients to improve the effectiveness of their business and technology operations, and deliver value to their customers, employees and shareholders. Find more at www.Lntinfotech.com or follow us at @LTI_Global

info@lntinfotech.com