

Case Study

Realizing Connected Construction Sites with the Power of Industry 4.0

The client is an India-based multinational engineering and construction company that caters to all core sector industries and infrastructure projects with capabilities spanning the entire gamut of construction, including civil, mechanical, electrical, and instrumentation engineering.



LTI helped a multinational engineering and construction company monitor their workforce at different locations and analyse equipment parameters in real time. The solution enabled the company to reduce operational costs, improve worker safety and optimize equipment utilization.



- Inability to track equipment in real-time as assets were in de-centralized locations
- Lower utilization of assets due to excessive idling
- High operational expense and low utilization ratio due to traditional and periodic asset maintenance
- Non-availability of real-time data led to workforce safety challenges and lower productivity
- Lack of supply chain visibility led to longer lead times for procuring raw material

LTI Solutions

Digitally transformed multiple construction

sites involving 200+ stakeholders and connected 35,000+ assets

Created a solution that catered to all three dimensions: Connected Equipment,
Connected Material, and Connected Workmen

Enabled continuous asset health monitoring and predictive maintenance which helped operationalize proactive maintenance schedules and timely maintenance interventions

Provided a mobile-based solution for work permits and digitization of checklists

Allowed tracking of materials across the supply chain that enabled material cost optimization and optimal inventory levels



Enabled RFID-based zone tracking of workers

that provided greater visibility into work sites, real-time incident awareness, and speedy evacuation capabilities, enhancing safety on site

Highlights of Solution

Asset and Fleet Sensorization leveraging ThingWorx platform

Connected Workmen

- Digital Work Instruction
- Active RFID based safety and zonetracking
- Automated gang allocation & productivity tracking

Multiple Construction Sites

Connected Equipment

- Automated Job Allocation
- Productivity & utilization dashboard
- Condition based monitoring and predictive maintenance

200+ Stakeholder

Connected Material

- GPS material tracking
- Scrap management & Consumption forecasting
- Integrated Fleet management

35000+ Assets

Internal

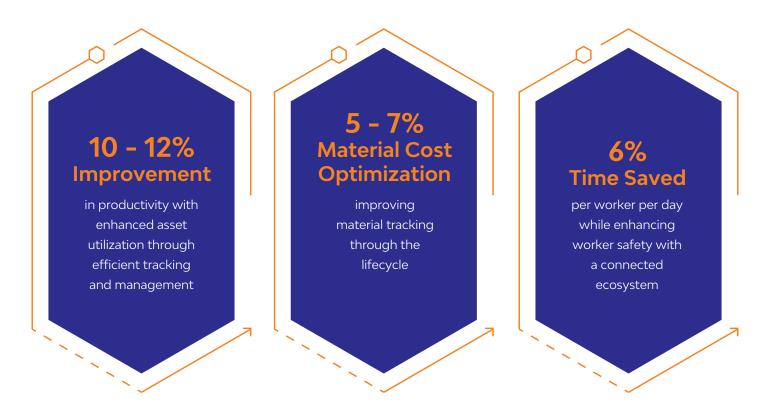
Construction Worker | Fleet Owners Engineers | Management

External

Suppliers | OEM Sub-contractors |

Sub contractors | Govt Authorities

Business Benefits



LTI (NSE: LTI) is a global technology consulting and digital solutions company helping more than 400 clients succeed in a converging world. With operations in 31 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 unrivalled real-world expertise to solve the most complex challenges of enterprises across all industries. Each day, our team of more than 33,000 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 http://www.Lntinfotech.com or follow us at @LTI_Global.

