Case Study

# Transforming Field Service Operations of US-Based O&G Midstream Company

Client

A Leading Midstream O&G Company, is one of the largest producers of natural gas liquids and one of the largest natural gas processing companies in the U.S. The Client is an asset-intensive organization with more than 100,000 "Processing Plant" assets such as transmitters, valves, indicators, PLCs, compressors, switches, and detectors, spread across locations. Reliability field engineers need to swiftly react in mitigating unplanned breakdowns, while addressing predictive, preventative, and corrective maintenance checks for smooth operations.

Challenges

It became difficult to consistently address these needs, due to many concurrent or in-pipeline work orders, esp. spanning multiple WO categories, within stringent timelines, and poor network conditions restricting real-time data availability.

Current solution (Syclo) was ineffective as:
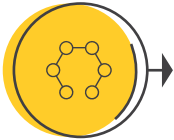
Field Engineers could not use a Cross Platform Mobile Solution built for low network environments.

Field Engineers could work on only one work order at a given point of time, could not support follow up work orders, and rejected work orders.
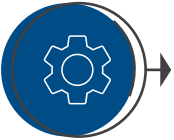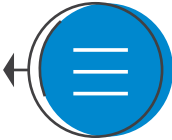
Field Engineers could not address materials and services needed for work-order processing.

Intermittent network conditions led to long sync times between Master Data and Application Data, need to be synced into the application.
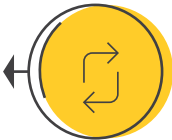
Data loss due to frequent sync failures resulting in incorrect handling of error scenarios from differential inbound (from Master Data) Work Orders, and differential outbound (to Master Data) equipment/asset status.

Multiple sites could not be synced/worked upon by a single engineer.
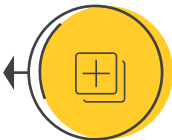
Also, from an IT standpoint, the client had to deal with huge yearly application license and support costs, an application that failed to address key user needs, working on a semi-responsive UI supported only on single platform, with steep application learning curve.
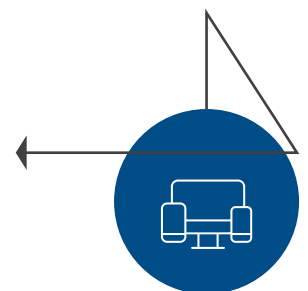
LTIMindtree Solution

LTIMindtree built FieldOn, a field-force mobilizing solution that was integrated Client Enterprise Asset Management (EAM) system, and provided easily customizable, end-to-end work order management. Key highlights of the solution are:

- Cost-effective, simplified, and intuitive solution built on robust open standards.
- Responsive and easy to use UI designed for extreme field conditions, supported on multiple platforms, and device of choice.
- Offline support with delta sync implementation, effective handling of sync conflicts and network fluctuations, and efficient usage of mobile storage.
- Client Server technology built on REST API, with middleware-based integration approach and Integration end-points for all EAM Systems.
- Business workflow of EAM replicated.
- Supervisor module for work order approvals and task assignments.
- Technical Features like Authentication and Authorization, EAM session propagation, Middleware data caching and compression, application logging, and usage collection.

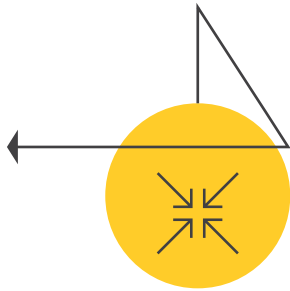## Business Benefits

20% increase in field-force productivity

700 iPads could now be used for a Simplified app with intuitive UI for all devices across iOS, Android, and Windows, that was otherwise available only on Windows laptops
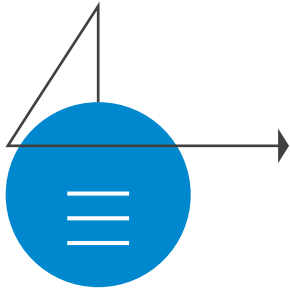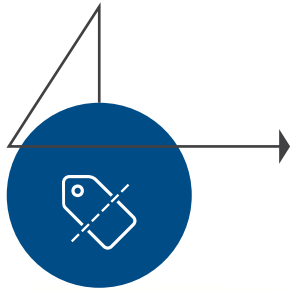
500,000 work orders processed in one year

Reduction in initial and delta sync times by 70%

30% cost reduction over license fees of replaced product

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 84,000+ 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 **https://www.ltimindtree.com/**

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