LTIMindtree

CASE STUDY

GeoSpatial Map Platform (GIS-based) for a Water Utility O&M

Client

The client wanted a sustainable water availability ecosystem, ensuring that every household is provided with good quality drinking water. The water supply was to be directed to rural families in over 3100 villages covering a population of over 4.8 million.

Challenges

- Tracking volatile water production from borewell

- Monitoring of drinking water quality

- Forecasting storage tank water level

- Estimating water demand for planning sufficient water supply

LTIMindtree Solution

- A Unified View of key performance indicators up to gram panchayat (GP) levels.

- Integrated asset management for quick turnaround time in service and spares, service management, and costs.

- Predictive analytics (using AI/ML models) of critical assets for root cause analysis and early detection of faults with triggers based on condition monitoring

- Performance optimization of solar power generation, pumped water consumption, and quality assurance of water, along with demand prediction.

Technology Coverage: GeoSpatial NxT platform

- ☑ **Asset Management**

- ☑ **Realtime field force management**

- ☑ **Predictive Maintenance**

17k+
Water Distribution pipelines

3100+
Villages covering 4.8 mn people

377 MLD
Aggregate capacity of Water

24x7
Operations Centre

Benefits

25%
increase in Turn Around Time (TAT).

Increased productivity with the availability of Digital Twin models.

85%
reduction in Human errors.

Increase in cost savings due to enhanced monitoring and timely action to reduce downtime.