

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

377 MLD
Aggregate capacity
of Water

3100+
Villages covering
4.8 mn people

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

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