Case Study

Tech Mahindra Achieves 96.5% Network Reliability in Utility Grid Transformation

Overview

A utility business leader in the Middle East was looking to deploy Advanced Metering Infrastructure (AMI) and optimize internal IT processes. To achieve this, they partnered with Tech Mahindra. We worked with them as the advisory consultant to guide the smart grid program and lead critical elements of the IT transformation.

Client Background and Challenge

A leading utility provider in the Middle East initiated a strategic transformation to modernize its metering infrastructure and IT operations. The primary goal was to implement a secure and scalable Advanced Metering Infrastructure (AMI) and optimize internal IT processes to drive efficiency, sustainability, and enhanced customer experience. However, it encountered significant challenges that hindered progress across two core areas:

Smart Grid Implementation

- Existing infrastructure lacked the scalability and security required for full AMI deployment

- The absence of a clear rollout strategy hindered alignment across business and IT teams

- The provider needed architectural guidance and procurement support for system-wide modernization

IT Process Optimization

- Limited internal capacity restricted application development and enhancements

- The inability to meet rising business demands strained existing resources

- Lack of standardized documentation led to inconsistent delivery quality

- Robust support and structured delivery processes were urgently needed

Our Approach and Solution

Tech Mahindra served as the client's strategic advisor, defining the utility's smart grid roadmap and spearheading key IT transformation initiatives. The engagement combined deep industry expertise with end-to-end execution, delivering a secure, scalable, and future-ready digital utility framework.

Smart Grid Advisory and Consulting

Through a structured engagement, a future-ready AMI strategy was developed where we:

- Crafted a comprehensive business case and phased rollout plan

- Designed a secure AMI architecture and communications framework

- Provided tendering support and program management planning

- Delivered consulting services for smart metering and grid modernization

IT Transformation and Managed Services

To enhance IT maturity and responsiveness, Tech Mahindra:

- Formed a customer-centric team to collaborate closely with users

- Established QA processes and standardized SDLC documentation

- Delivered managed services for applications with defined SLAs and KPIs

- Deployed experienced domain experts for a smooth transition

Business and Community Impact

The strategic engagement laid the groundwork for measurable improvements in grid performance, IT efficiency, and customer satisfaction. The following outcomes reflect the modernization across metering and IT operations:

Smart Grid Outcomes

- Installation of 280,000 smart electricity meters and 300,000 water meters

- Replacement of 55% of mechanical meters with smart meters

- Up to 96.5% accuracy in monthly billing

- Reduced inactive meters to 5%, enhancing operational efficiency

- 96.5% communication KPI achieved across devices, reflecting high network reliability

IT Transformation Outcomes

- A significant reduction in support ticket volume, reflected in year-on-year pricing

- Improvement in quality and consistency in development and deployment

- Revamping of the knowledge repository and implementation of the delivery operations tracker

- Streamlined operations and reduced administrative overhead

About Tech Mahindra

Tech Mahindra (NSE: TECHM) offers technology consulting and digital solutions to global enterprises across industries, enabling transformative scale at unparalleled speed. With 150,000+ professionals across 90+ countries helping 1100+ clients, Tech Mahindra provides a full spectrum of services including consulting, information technology, enterprise applications, business process services, engineering services, network services, customer experience & design, AI & analytics, and cloud & infrastructure services. It is the first Indian company in the world to have been awarded the Sustainable Markets Initiative's Terra Carta Seal, which recognises global companies that are actively leading the charge to create a climate and nature-positive future. Tech Mahindra is part of the Mahindra Group, founded in 1945, one of the largest and most admired multinational federation of companies. For more information on how TechM can partner with you to meet your Scale at Speed™ imperatives, please visit https://www.techmahindra.com/.

TECH mahindra

www.youtube.com/user/techmahindra09
www.facebook.com/techmahindra
www.twitter.com/tech_mahindra
www.linkedin.com/company/tech-mahindra
www.techmahindra.com
mktg@TechMahindra.com