Case study

XmerIOT for Intelligent Asset Management

LTIMindtree's XmerIOT is an IOT-based online transformer monitoring and diagnostic solution ensuring reliable functioning of critical transformer assets. It helps in proactive monitoring, continual analysis, and precise diagnosis in real-time to prevent failure and minimize downtime.

Challenges

The transformer plays an important role in ensuring industry-reliable power supply. Hence, it is imperative that transformer assets function reliably. LTIMindtree's solution addresses the following industry challenges:

- Need for a cost-effective monitoring and analysis solution in real-time

- Need for real-time data to ensure appropriate on-ground measures to avert failure and downtime

- Delays in creation of work orders for proactive actions

LTIMindtree Solution

Minimal installation cost

Eliminates need to install software in the data capture side of the transformer. The hardware comes in a compact layout requiring minimal installation, and is best suited for retrofit. XmerIOT is affordable and fully compatible with any transformer manufacturer's sensor controller.

Designed as per IEEE guidelines

The out base is built on best practices and IEEE guidelines for operational parameters, values/ranges. Works with the entire range of distribution transformers.

Works with any sensor controller

Compatible with any built-in transformer sensor system.

Save substantial capital cost

Save substantial capital cost with zero in-house server storage. XmerIOT is designed to store all real-time data captured on the SAP Leonardo Cloud platform on the HANA cloud database. It is designed for storing multi-parameter data captured by sensors for analytics.

Intuitive user experience

The XmerIOT Cockpit provides a remote monitoring cockpit, actionable messages, substation controller personas and access anytime, anywhere.

Seamless integration

Integrates with S4/HANA on-premises/cloud systems. Based on critical levels, the system triggers work, order, or trigger notifications such as critical part procurement orders and resource management for maintenance work.
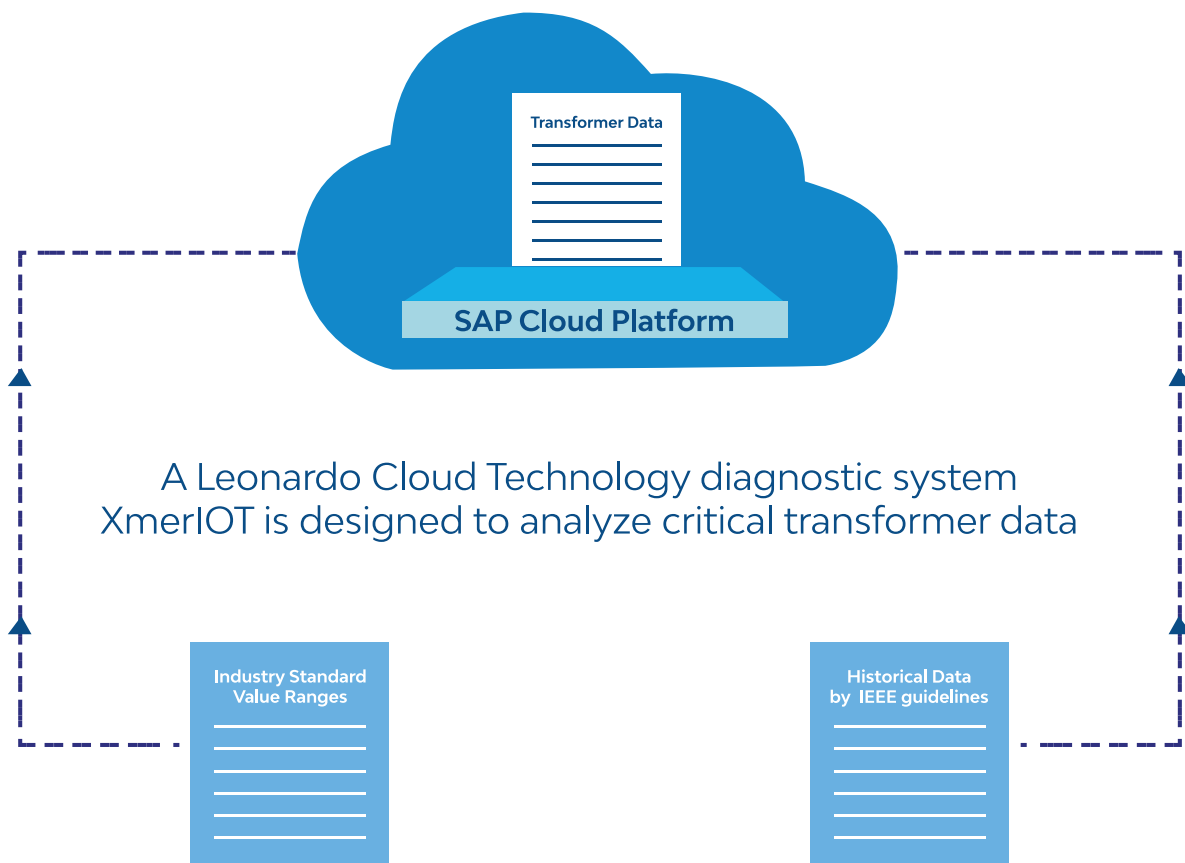
Transformer Data

SAP Cloud Platform

A Leonardo Cloud Technology diagnostic system
XmerIOT is designed to analyze critical transformer data

**Industry Standard
Value Ranges**

**Historical Data
by IEEE guidelines**

Figure 1 – LTIMindtree's XmerIOT Solution

Business Benefits

Saves substantial CAPEX with zero need for in-house server storage.

Asset data is proactively monitored, continually analyzed, and precisely diagnosed in real-time.

Out base is built on best practices and IEEE guidelines for operational parameters values/ranges. Works with all range of distribution transformers.

Its state-of-the-art dashboards and cockpit analytics provide insight into primary and secondary parameters including voltage and current, power and load analysis, coil winding and oil temperature.

Provides load protection measures, over both Web and mobile interfaces, for access anytime, anywhere.

Predefined monitoring logic triggers alerts of any abnormality to prevent any catastrophic failure, ensuring longer life of transformers.

Solution connects to any backend SAP suite of products, and triggers back-end maintenance work orders based on level of severity.

System-generated warnings of data moving toward danger zones allow substation controller to take appropriate on-ground corrective measures.

Link of the Solution: https://store.sap.com/dcp/en/product/display-0000029732_live_v1