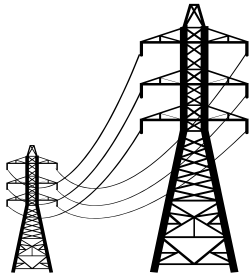


VALUE CHAIN ANALYSIS

ROLE OF ANALYTICS IN POWER AND UTILITIES

TRANSMISSION & DISTRIBUTION



Network management:

Information gathering systems such as MDAS (Meter Data Acquisition System), AMRs (automatic meter reading), GIS mapping, SCADA systems etc helps in CBM (Condition Based Monitoring) and predictive asset maintenance.

The right mix of sensors and associated analytics can give network managers a good view of the AHI (Asset Health Index) which can be used not only for maintenance but also for replacement of poor assets.

Customer management:

Information systems on the customer management aspects using EMS – Energy Management Systems) which provides a strong base for DISCOMs in detecting fraud, better DSM (Demand Side Management) and better customer service.

GENERATION



Data points give real-time performance indicators on key equipment such as temperature, pressure, vibration, noise levels etc.

In the recent past, there have been innovations on predictive analytical tools which gather the DCS data (OT) and also the ERP data – IT (such as maintenance logs, asset logs, operating histories etc.) to pick patterns of machine performance under various operating conditions, which in turn is used to predict potential failures and improve efficiency & reliability.

Unlike T&D, the analytics solutions in generation globally are still nascent, but these tools offer promise in transforming the sector in the coming years especially in India.

Explore more about this at : www.deloitte.com/convergence