

Emerging Tech in Utilities

Utilities are using the Emerging Tech in their implementations. Matthew Gleeson, VP, Global Alliances & Channels, Oracle Utilities Global Business Unit discusses some of these dimensions

DR ARCHANA VERMA
archanav@cybermedia.co.in

HOW CRITICAL DO YOU THINK IS THE ROLE OF NEW-GEN TECHNOLOGIES IN INDIA'S POWER SECTOR?

With rising demand from utility firms for effective ways to improve the customer service and engagement models, utility providers are realising that the traditional solutions that have helped them run their businesses until today will not be able to provide them the scalability and agility they need for the future. Additionally, their applications will also not allow them to evolve towards a more customer-centric grid model.

There is no doubt that the utility landscape is going through a transformative change, following decades of what I call 'engineering improvements' to the model of service. The new world utility will continue to derive safety and reliability from solid engineering-based decisions but will not be able to achieve a new model of efficiency and service without adoption of new-gen technologies.

The success in implementing these technologies depends upon the usage of data that only a few utilities have achieved until now. Some of the best cases where we have driven substantial improvements, utilities are using the massive explosion of data that smart metres supply (roughly a 3000x increase on scalar meter information) to:

- Find leakages they could never have previously hoped to avert
- Plot out peak periods for usage across the entire consumer base and take proactive steps to transition usage models so as to avoid power demand 'high tide marks' (for which infrastructure and generation is built and maintained to address a measly 60 minutes out of an entire year)
- Identifying customers who have changing energy consumption patterns (purchases of Electric vehicles, installation of air conditioning, utilisation of degraded performance electrical devices of all shapes and sizes) and engage them to think about energy in a new way.

Deployment of New-gen technologies such as artificial intelligence (AI), machine learning (ML), Internet of Things (IoT), and cloud computing eliminates the need to form a hypothesis, capture and manually analyse data to suggest an action path. Instead, the intelligence reviews trends and occurrences and in nanoseconds, can recommend or even take decisive action, based on the deep understanding of how the utility operates. The ideal energy resource management system will leverage AI and ML capabilities coupled with AMI data, weather forecasts, SCADA and IoT device interaction to reliably predict operational challenges, thus improving asset lifecycles and cutting outage time driving down expenses for consumers, decrease in emissions, and help the country reach its 100 percent electrification target.

SHARE SOME INSIGHTS ABOUT YOUR OVERALL MARKET STRATEGY FOR UTILITIES BUSINESS AND HOW CAN ORACLE'S EXPERIENCE WORK IN THE INDIAN MARKET?

As mentioned earlier, the future lies in proper utilisation of data - - how you capture it, analyse it, and take actions from it. Oracle is known for its ability to do all of these with exceptional precision. This is the foundation for any next-generation utility to improve its market position and efficiency. Our market strategy is simple - we offer the broadest footprint across all the solutions ranging from grid management (Advanced Distribution Management, Outage & Emergency Control, Field Servicing, Strategic Asset Maintenance, Distributed Energy Resource Management, Smart Meter device and data management) through to the customer (Energy Efficiency, Digital Service Layers, Customer Engagement Programs, Usage Trend Analysis and Load Forecasting, Energy Settlement, Revenue generation and protection). Running on a common data model, these offerings let customers truly gain a holistic and accurate view of their operations - from the energy grid, all the way through to a customers' homes. And Oracle can do this all at scale.

Utility companies have responded positively to us. We also have the core enterprise needs such as financials management, cybersecurity, or advanced analytics through our vast portfolio of Oracle Cloud solutions. In a nutshell, we have solutions that allow you to incorporate innovative new capabilities at any, many or all of your crucial business functions, and we continue to invest more in



MATTHEW GLEESON
VP, Global Alliances & Channels
Oracle Utilities Global Business Unit

the capabilities of those solutions so that Utilities can focus on achieving their core KPIs and not have to worry about changing technology to keep pace with the expectations of the market and the customer. In fact, we have even helped customers to redefine their Utilities KPIs by removing the need to be inwardly focus on the creation of solution platforms to meet pre-existing KPIs, but instead to use our solutions to help frame a new and innovative utility of the future.

WHAT ARE THE CHALLENGES IN THIS FIELD WITH THE CHANGING SCENARIO AND HOW ARE YOU RESOLVING THE PROBLEMS?

The space calls for continuous innovation towards developing a dynamically new model of an Intelligent Utility. If not, then we are failing to make the change that the market needs and the consumers demand. We must seed intelligence at the network level, driving decisions in real-time that ensure we go beyond just 'safe and reliable' but also to be environmentally responsible and socially respected. The role of Oracle Utilities in India is to provide a strategic beacon that helps Indian Utilities to envision a new future model that uses its data intelligently, drives decisions that support sustainable outcomes, and dismisses the notion of their end customers being gracious for the receipt of water, gas or electricity - but instead considers them a partner in the smarter utility landscape of the future.