Captavo Solution

Highlights:

- Big Data & ODI based project covering 5 functional domains Smart Energy Services, Business Support, AMI Ops, Grid T&D, Customer Experience.
- 6,200 Terabyte Available Capacity in Data Analytics Platform All Tiers, 23 Production Source Systems , 7 Vendor Delivery Partners , 1600 Business Rules, 12 New Technologies including Hadoop, Scoop, Impala, OBIEE, Spark, Hive, Big Data SQL, Scala, Kafka, Big Data Appliances, Oracle Data Integrator.

Solution

- Captavo was responsible for Functional and Technical consulting and build out enterprise data and analytics platforms that provide best of breed solution implementation that is scalable and provides extreme supportability in terms of systems management and data management.
- A full-blown Data Lake was constructed in HDFS/Hive where all raw data for new sources and enterprise sources across entities flow into the refinery. All data discovery and advanced analytics were enabled on the Data Lake.
- Key components required for all life cycle stages of Ingestion, data movement, data processing, compaction, platform management etc. implemented
- Consolidated and Standardized data sets across OpCos and 3 Utilities to serve multiple Analytical workloads avoiding point to point integration between systems by defining a Common Information Model defined that supports standard reporting and analytics.

Business Intelligence & Data Analytics

Business Need

- Business Intelligence and Data Analytics realization through Business Intelligence and Analytical tools for Data Scientists and Business users
- The analytics platform to leverage smart grid data as a strategic asset to generate actionable intelligence, drive innovation, and unlock new business insights.
- Data Analytics Platform to serve as the foundational tool for convergence and scalability of analytical solutions across different Operating Companies under the Corporation
- Aggregation and integration of data from multiple sources across the Operating Companies
- Enable business users and data scientists with self-discovery capabilities to shape eloquent decisions.
- Enable Cross - OpCos Data Discovery and Advanced Analytics – Use of analytics Toolkit to extract value out of data.

Customer Benefits

- ✓ The business benefits identified with broad range of use cases like Network Connectivity, Asset Health, Storm Readiness, Historical Outage, Outage Prediction, Storm Readiness.
- ✓ The Foundational use case of network Connectivity will expose and eventually automatically correct inaccuracies in the electrical connectivity model.
- ✓ Improvement through greater accuracy in identifying outages and fewer false outages reported, subsequent societal benefits, improved customer satisfaction.
- ✓ Integrate real-time asset condition data from intelligent devices enabling asset health scoring system, moving to a targeted approach to systematically reduce asset risk, decrease in maintenance cost, deferred capital replacement cost, increased earned regulated return and reliability improvement.
- ✓ Increased quality and efficiency in performing historical outage analysis.
- ✓ Reliability Improvements from avoided outages (predominantly distribution outages) and improved customer satisfaction from avoided outages.