



Power Sector

A Paradigm Shift in Data Monitoring and Analyzing

Case Study

Background



Opportunity

Data Monitoring
Sentimental Analytics



Why Visualr

Conversant and Persuasive
Visualization
Low TCO
Scalability



Data Sources

SAP HANA
SCADA
GIS
Twitter

The client company is a leading giant in power generation and distribution sector. They are engaged in distribution of electric power in Northern & North-Western parts of Delhi, and serves a populace of around 7 million.

To ensure smooth, uninterrupted and streamlined power supply, the firm leverages cutting edge tech-automated systems to power its entire distribution network. A number of advanced systems, such as 'Supervisory Control And Data Acquisition' (SCADA), Geographical Information System (GIS), Outage Management System (OMS) and Distribution Management System (DMS) form the backbone of its distribution automation project. The company has also adopted modern technologies like High Voltage Distribution System (HVDS) and LT Aerial Bunch Conductor in order to fight the menace of power theft.

Opportunity: Sales Analytics

Having a very large number of customers, the power meters installed in their premises generate big volume of data at a regular and consistent rate. It turned the overall data size of the company very huge, which was quite difficult to manage using legacy data management solutions. The company compiled its data primarily using Oracle and SAP HANA, both of which were integrated with SCADA and Geographical Information System (GIS). They were looking for a robust solution that could manage their extremely voluminous data.

The data generated the firm emanated from a number of time series graphs that primarily used to be line graphs of various transformers that showed electric power consumption and average power load of all these transformers. Apart from that, this data also indicated start time and end time of certain events such as high load, on the basis of various parameters. Main issue being faced by the company was the difficulty in merging this data emanating regularly from multiple sources into a consolidated and streamlined database.

The client also wanted to adopt a system that could help them in social media analysis, primarily comprising of sentimental analysis and concurrently merging the data graphs with map graph for enabling simultaneous analysis and dashboard creation.

The Game Changing Logics



Enhancement in Maintenance Operations

After deploying Visualr, the company experienced enhanced maintenance operations as the solution allowed them to efficiently monitor the performance of transformers during peak hours for load shed and peak load. It helped the company in cutting its costs by around 70%, as regular monitoring through Visualr enabled them to determine regular maintenance schedules that effectively prevented transformer damage.



Improvement in Recruitment Process

Leveraging the social media behavior analytics powered by Visualr, the company was able to increase their direct interaction with the ground level customer by around 30%, while their capability to identify complaints made by unidentified users about transformer failures and power outage improved by around 80% to 95%, as now they were able to monitor its transformers in real-time and compare their current status with the details given by the callers.



Total Cost of Ownership

Adopting Visualr also helped the firm in cutting down their IT related expenditures considerably to around 30% to 40% on annual basis. Previously, the company had to purchase separate licenses for every aspect of the legacy data visualization tools they were using, and after having replaced those tools with Visualr, a single and robust multi-function data visualization tool, decent costs were being saved, week after week, month after month and year after year.

Primary Outcomes

Effective Monitoring



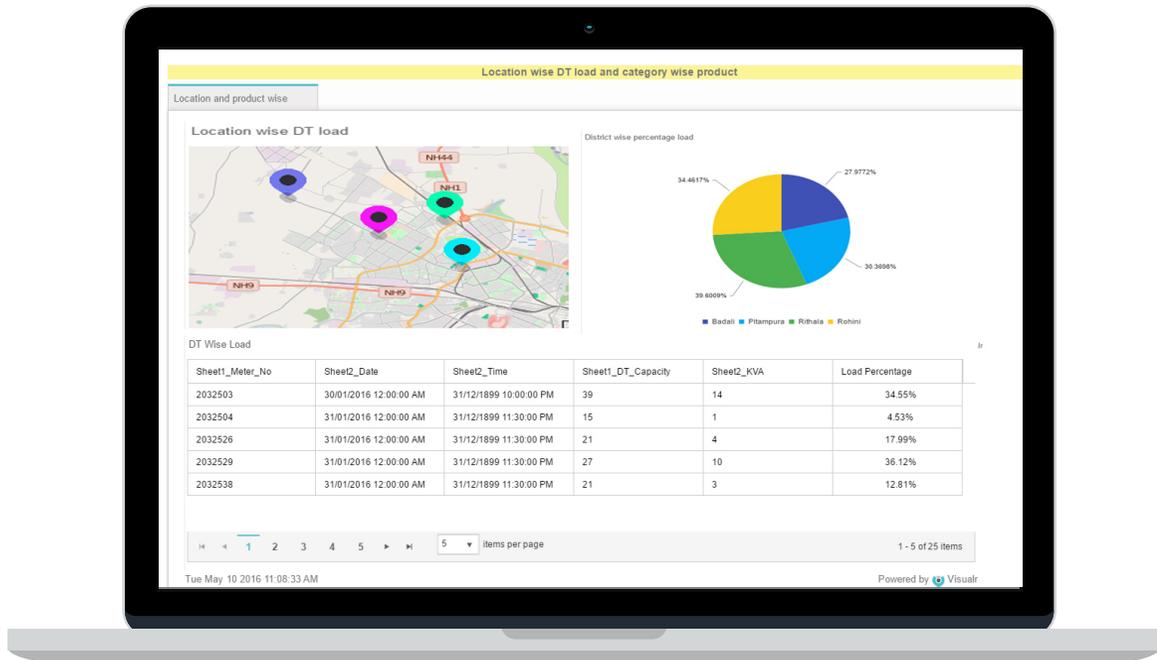
Visibility of KPIs



Reduced Time and Cost by 50%



Key Performing Metrics



Following the success of the Visualr deployment, the client established corporate imperatives across Electricity Distribution. To manage progress, baseline data had to be collected manually and target improvement set. However, more than 75 percent of these imperatives measured by data housed SCADA, GIS and SAP HANA Data was extremely difficult to combine and analyse, so leadership was unable to visualize into metrics of Power Transmission. Using Visualr and Data Refinement, Visualr is able to combine and analyse information access performance metrics critical to the pursuit of Power Industry imperatives.

Key Benefits



Accurate measurement of progress in terms of power supply were able to be gauged now with precision.



50+% reduction of BI related Human Cost



Enhanced Customer grievances were addressed with the help of better targeting and recommendations.

About Visualr

Visualr is a state-of-the-art data visualization tool, which allows you to see through your data and gain useful insights that might be of great help to you in realizing the status, issues and demands of your business in a better way.

