Driving innovation through predictive analytics and cloud by modernizing the complex data management process

Case Study

Industry: Energy & Utility

Deliverables:
• Forecasting
• KPI's
• Reports
• Dashboards
• Insights

Technology:
Power BI, MS SQL, SSIS, SSAS, ASP.NET MVC, Ernbedded code Node Js, Angular Js, Express Js, Socket.io, Firebase

Country: USA

Project Goal:
The client wanted to stay up-to-date with the modern analytic tools for gaining future insights and elevate the business goals. The main focus of the solution was to improve the process of Data Management and Sales Reporting Structure. The solution also included the integration of the client's data to the cloud for better utilization and rapid operations that would enrich decision making, real-time sales forecasting, identify underperforming areas and optimize business strategies.

Challenges:
- Obtaining gross sales information for total international division was challenging.
- It was difficult to maintain the hierarchal structure of the affiliates.
- Lack of a flexible platform to manage data.
- Handling multitude of information on daily basis streaming from distinct regions was quite a difficult task for the higher management authorities.
- Sorting information in an organized manner was a complicated task.
- Data Filtration on various distinct parameters was time consuming.
- Quick Extraction, Transformation & Loading of data included intricate operations.
- Need for extensively reliable and customizable reports to quicken decision making process & drive future insights.

Leveraging a highly-equipped Big Data Analytics Solution to simply integrate myriad data, maintain data management, generate accurate analysis, and drive future insights with the help of reliable reports.
Solution:
- The interactive interface enables client to customize reports according to their business needs and derive meaningful insights quickly.
- Client can now visualize business data, monitor overall performance and make informed business decisions with the help of few clicks using personalized single-view dashboard.
- Drilling into critical business KPI’s to identify and highlight areas that need improvement and work on data derived from multiple sources has become easy.
- Our scalable Power BI solution helped in analyzing real-time data coming from various sources along with monitoring daily operations as they occur.
- Easy integration with office documents such as excel spreadsheets, power point and more. Client can even customize these reports.
- Pro-active alerts, broadcasts, and notifications.
- The client now has consolidated data relating to the various regions they sell which helped cater better service and expand their business.
- Our on-premise and collective approach helped them solve their daily manual operations seamlessly.
- Our proactive solution helped the client to overcome the following challenges:
  - Organization of Raw and Unstructured Data
  - Extraction, Transformation & Loading (ETL) of Data
  - Data Cleansing, & Deduplication
  - Data Filtration based on customer name, region, month, year etc.
  - Data handling & Data Modelling
  - Analytics (Insights)
  - Data Convergence & Large Data Searching

Features:
- Affiliate Reports based on Cities, Grade, Industries, Contract, Credit, Finance, Sales etc.
- Potential Credit Analysis – By Direct Cost
- Potential Credit Analysis – By Contract Number
- Revenue & Cost by Contract Grade
- Details on Earned/Pending Commission
- Generation of informative graphical reports for easy understanding
- Dynamic Dashboard for a single view of the entire solution
- Daily calendar updates, events and notifications
- Invoice Management
Our highly proactive Power BI solution helped the client integrate tons of data, simplify data preparation, improved distinct operations as well as data management and generate accurate analysis. Putting an analytical system in place to effectively analyse data helps an enterprise to obtain useful information, suggest conclusion and enrich decision making.

We provided the client with specifically crafted solution for enhanced productivity. We left no stones unturned in the quest to build a precise solution that could meet the client’s needs. We truly understand our client’s requirements, thus offering fit-to-purpose solutions for a better experience and interactivity.

The affiliated reports were embedded in the existing MVC web application to help client get all the insights at a single place and take quick actions. The solution was individual and does not require to go on powerbi.com to view reports. The solution also included an email subscription for the users, this helped them get updated reports automatically after the data was refreshed via email.

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The professionals at KCS created a cloud-based predictive analytics platform that identifies and predicts trends in real-time from big data streams, including social media analytics with help of Node Js, React, Mean.Js, firebase and elastic search.

We leveraged a stellar platform with the use of full stack technologies such as Node, Angular, React, React Native, ELK that allow customers to import, transform, and filter their data from hadoop data lake and create visuals on it. With the help of that tools, customers can perform analysis on their data with various precreated visuals, AI & ML algorithms.