Cloud-enabled data convergence for better business outcomes of a consumer goods manufacturing company

Industry: Manufacturing

Deliverables:
- Dashboards
- KPIs
- Reports
- Insights

Technology: Big Data Open source technologies, Spark, Elastic Search, Kafka, Scala, Mean Stack, Power BI, Node Js, Angular Js, elastic search, Mongodb, Mean.js

Country: USA

Project Goal:
The main purpose of the project was to create an on-premises solution for the client’s sales reporting structure as well as the flexibility to move their entire data to the cloud for faster processing time. The client wanted to generate rich iterative as well as precisely formatted reports, visually explore huge data and quickly discover patterns to make quicker decisions.

Challenges:
- Lack of a customized platform and high need to modernizing infrastructure.
- A multitude of information was streaming in everyday from various regions making it difficult for the client to maintain a central repository in their traditional IT infrastructure system.
- Sorting data through various tools like SQL and SAP, data sets and spreadsheets was slowing down the growth and the success of the organization.
- The generation of the gross sales report in these traditional systems was not possible as the data was unstructured.
- Difficulty in describing the technical design of iGDW and addressing the detailed business drivers, context and requirements for the gross sales.
- Absence of a reliable Gross sales reporting for the total International division with a breakdown of export and domestic channel.

Deliverable of this project is to implement the gross sales reports with:
- Volume
- Customers
- Date
- Currency
- Brand

We rendered the client with a unique platform that could integrate a huge amount of data lakes and generate authentic reports for futuristic insights to boost productivity. Our smart solution automated various operations and enabled real-time sales forecasting enabling robust IT Modernization.
Solution:
The client wanted an on-premises solution for their sales reporting structure as well as the flexibility to move their entire data to the cloud for faster processing time. A modern enterprise needs a modern set of analytics – supporting big data and everything else and gain business insights and enhance business initiatives.

- We provided our Power BI solution which is a cloud-based analytics service that gives a single and more comprehensive view of most of the business-critical data.
- Our Azure SQL Server Database service is scaled up during the data processing to reduce processing time and then scaled down once complete to minimize costs.
- ETL (Extraction, Transformation & Loading)
- Data cleansing, Filtering, Deduplication
- Unstructured, Structure Data Handling & Data Modelling
- Region wise Data Searching & Data convergence
- Driving futuristic insights & visualization with the help of Analytics
- NLP (Natural language programming)
- Machine Learning
- Analytics (Insights, Visualization)
- Artificial Intelligence

Features:
- Dashboard: Brand performance
- Dashboard: Customer performance
- Yearly / Monthly / Quarterly Reports
- Regional Sales Reports
- Brand Performance Report
- Sales by brands and customer
- Machine learning Algorithm
- Vertical & Horizontal Bar Charts
- J Query Gauge plugins
- Visual Representation of Gross Sales by Country through Maps
Result:
Our intelligent Power BI solution and IT Modernization helped the client centralize its huge amount of data, connect to hundreds of data sources, simplify the data preparation, generate sales reports faster and easier as well as drive ad hoc analysis. It helped the client interact with sales team across various regions through shared interactive visuals while quickly tracking sales trends to optimize business strategies.

Our astounding solution helped the client dynamically adjust tactics and updates in real-time while converting bottom line into top strategies. It enabled them leverage live data and real-time dashboards to review current sales performance. The client could easily identify underperforming areas. Moreover, determining the variance between actual revenue and sales targets by segment was simplified. Also, the platform was user-friendly enabling the client to reach new heights as per their changing demands. They could quickly generate BI gross sales reports based on consumer behaviors, product sales, and brand popularity.

We provided a simple yet intuitive and a collaborative way to the client in order to solve their everyday business problems. To help the client make most of their sales data we implemented an Azure-based cloud solution to abstract, store, visualize and analyze core business data. With the Power BI model and reports, the client was able to generate time intelligent reports based on month-to-date, quarter-to-date and year-to-date, across the available actual and target data.