Case Study – SAP Surround with Microsoft Azure

Overview:

A global medical device company that is changing lives through better smiles. They reimagine and reinvent the way orthodontic and restorative treatment is presented and delivered to millions of people around the world. Annual sales in 2018 were US $ 466.56 Million. Organization Size: Corporate (11,000+ employees).

Opportunity:

The opportunity was to architect, design and build a consolidated Enterprise Data & BI Platform on Microsoft Azure. This opportunity is part of advanced analytics & self-serve BI modernization roadmap that Align's management has envisioned for next 3 years. The roadmap encompasses bringing together data from SAP ERP and other business sources (such as Salesforce) to create unified Data Lake/Warehouse on Microsoft Azure to enable Advanced Analytics with real time analytics, self-serve BI and ad hoc querying for the enterprise.

Solution Summary & How we did it:

DynApt team started off by testing the feasibility of Azure Data Platform for Align's SAP Data Warehousing requirements using Azure Data Factory. This involved loading the master and transactional data from SAP ERP to Azure SQL Data Warehouse. Once all datasets were loaded, the transformation logic from SAP BW was replicated in Azure and this transformation was executed in a manner that was generic, performant & scalable. Semantic Data layer for business was recreated to enable in real-time, self-serve BI using Azure Analysis Services where row level & object level security was implemented. Power BI will be connected to Azure Analysis Services to enable interactive visualization and ad-hoc analytics. The integration of Azure SQL Data Warehouse with Azure DevOps was also done to ensure stable and automated continuous integration and deployment pipelines.

This solution will enable customer to conduct business analytics scenarios like supply chain optimization & forecasting using ML-led, Databricks executed models with lower TCO & higher performance.

Business Impact:

- Consolidation of SAP and non-SAP data in a common Azure based data stores leading to data democratization
- Ability to consolidate multiple Enterprise Data points and apply ML-based analytics (using Databricks) to gain deeper Business Insights.
- Achieving self-serve BI & ad-hoc analytics using Power BI

- Establish a business data layer for AI/ML led Advanced Analytics scenarios in future

Case Study - Architecture