

Harmonizing Tech Brilliance: Business Performance Management system for a technology leader

A Transformative prototype with Microsoft Fabric

Client Overview:

A global Technology leader, uses an enterprise-wide system to centrally report business scorecards and related insights to thousands of stakeholders in the corporate HQ and field. There are hundreds of metrics used across various functions, roles and personas. With the complex data flows, source systems and agile business processes, platform agility and scalability has been an area of ongoing improvement.

Pressure Points

As the scorecards cover number of functions., roles & personas, geographies and segments, data ownership and engineering ownership often overlap and required significant collaboration effort. Creating one version of truth for various datasets has been a challenge due to duplication of workloads and data storage. Data governance has been a challenge too. There were multiple layers of data aggregations. Following the migration from Databricks compute to Synapse spark, there were performance challenges in few of the data processing jobs.

Multiple Engineering teamsWorkload, data model & data duplicationCo-development challengesProcessing Performance challenges	Multiple Engineering teams	Workload, data model & data duplication	Co-development challenges	Processing Performance challenges
--	----------------------------	---	------------------------------	--------------------------------------

Solutions

Sonata team deliberated on the key challenges and root causes of the problems, developed a solution prototype on Microsoft Fabric and showcased the benefits.

Key capabilities of Microsoft Fabric such as Workspaces for collaborative engineering, OneLake for maintaining single source of truth, shortcuts for creating data mesh and reuse data and logic across subject areas, Power BI Direct-lake for improved performance and data latency, Power BI online edit option for parallel reports development and data lineage maps for traceability helped solve the key challenges.

Subject area workspaces	Data mesh with Shortcuts	Power BI Direct Lake – live scorecards
Power BI online edit for parallel development	Fabric Spark engine for data processing	

Results

Established a model for federated and parallel development environments using Fabric workspaces for subject areas, improved spark job performance and report data freshness, demonstrated the benefits of Unified data model for maintaining single source of truth.

Spark Job performance improved: Data freshness improved: 20%+ Clear approach for Unified Data 20% Model - Estimated reuse: 25%+

Showcased Engineering Agility improvement