SHYENA TECH YARNS

Data Science. Digital Transformation

Industry	Automobile Service
Use Case Title	Data Curation using Microsoft Azure Platform
About the Customer	The Client is a leading automotive aftermarket services platform based in North Amercia.
Business Problem	The customer had a huge database that required optimized data processing and transformation. They needed a solution to curate their data using the Microsoft Azure platform.
Solution	Solution was developed to fulfil the customer requirements. The overall solution approach is described below. **Stats:** • Number of pipelines developed: Over 50 • Incremental load frequency: Every hour • Full load frequency: Monthly **Implementation**: • Developed over 50 pipelines on Microsoft Azure Data Factory platform for data transformation and curation of a large database. • Utilized data integration and transformation activities in Azure Data Factory pipelines to handle various data manipulations. • Implemented incremental load pipelines to process new data changes since the last run every hour by triggered pipelines, ensuring data freshness. • Created several stored procedures for streamlined data transfer from temporary to target tables. • Automated triggers were set up on Azure Synapse Analytics, with hourly intervals for incremental loads and monthly intervals for full loads, ensuring timely and accurate data transformation.
Outcome	• Improved efficiency in data processing and transformation. • Timely and accurate data transformation through automated triggers and incremental load pipelines. • Streamlined data transfer from temporary to target tables using stored procedures. • Enhanced data freshness and availability for further analysis and decision-making. Increased productivity and reduced manual effort in data processing and transformation. • Improved data quality and accuracy through automated processes. • Enabled faster decision-making based on up-to-date data.