🔍 Detailed Scenario Statements

Scenario 1 – Customer 360° Analytics

Business Challenge: A large retail enterprise operates across e-commerce, physical stores, and call centers. Customer data is scattered across CRM, ERP, loyalty apps, and website logs. Leaders lack a single view of customer behavior, making it difficult to personalize marketing and predict churn.

Objective: Build a Customer 360° platform that unifies data into a single repository, applies master data management (MDM), and enables customer segmentation and campaign analytics.

Scenario 2 – Real-Time Fraud Detection (Banking)

Business Challenge: A bank needs to detect fraudulent credit card transactions in real time. Current batch reporting identifies fraud only after hours, causing financial losses and reputational risk.

Objective: Create a real-time fraud monitoring system that processes transactions as they arrive, applies ML models, and alerts analysts instantly.

Scenario 3 – Marketing Attribution Analytics

Business Challenge: A digital-first company spends millions on online ads across Google, Facebook, and affiliates. Marketing teams cannot accurately measure ROI or attribution across channels due to siloed reporting.

Objective: Develop a marketing attribution system that consolidates ad spend, conversion, and customer engagement data to optimize campaign investments.

Scenario 4 – Healthcare Data Lake for Research

Business Challenge: A hospital group wants to combine Electronic Medical Records (EMR), IoT device streams, and insurance claims data to support clinical research. Data silos prevent researchers from identifying cross-patient patterns.

Objective: Create a Healthcare Data Lake that ensures data governance (patient privacy), enables ML-driven research, and supports operational reporting.

Scenario 5 – Telecom Churn Prediction

Business Challenge: A telecom operator faces high churn rates. Call detail records (CDRs), billing, and support logs are stored in disconnected systems. Lack of predictive insights prevents proactive retention campaigns.

Objective: Build a churn prediction platform to process billions of CDRs, apply ML to predict churners, and give marketing teams early warning.

Scenario 6 – Supply Chain Optimization (Manufacturing)

Business Challenge: A global manufacturer manages a complex supply chain spanning factories, warehouses, and logistics providers. IoT sensor data (machine health, shipment tracking) and ERP data are disconnected, leading to delays and inefficiencies.

Objective: Build a Supply Chain Data Platform that integrates ERP, IoT, and logistics data to enable predictive maintenance, inventory optimization, and real-time visibility.

Scenario 7 – Enterprise Data Governance & Compliance

Business Challenge: A multinational corporation must comply with GDPR, HIPAA, and CCPA regulations. Data is spread across global systems, making it hard to track lineage, apply access controls, and prove compliance.

Objective: Implement a data governance and compliance framework that ensures secure, governed, and auditable data usage across all business units.