Part 3: Evaluating FashionMart's data architecture: Strengths and areas for improvement

Assess FashionMart's EDA by identifying its strengths and areas for improvement across key architectural components. Refer to *Part 3 in the lab instructions.*

1. Name of the enterprise: FashionMart

2. Strengths

Sr. No.	Strength	Description	Impact
1	Scalable Data Architecture	FashionMart uses cloud-native platforms like Snowflake and BigQuery, and leverages serverless computing (e.g., AWS Lambda) for on-demand scalability.	Ensures seamless performance during traffic surges, enabling the system to grow with business needs.
2	Analytics and BI Tools	The enterprise uses powerful tools like Tableau, Looker, and AWS SageMaker for dashboards, customer segmentation, and predictive modeling.	Enhances decision-making through real-time analytics and proactive forecasting across departments.
3	Data Security Measures	Implements AES encryption, RBAC, OAuth2, and GDPR-compliant tools like OneTrust.	Builds customer trust, reduces risk exposure, and ensures compliance with data privacy regulations.

3. Areas for improvement

Sr. No.	Area for improvement	Description	Impact
1	Data Silos	Data from POS, marketing, inventory, and supplier systems may be partially fragmented due to inconsistent integration.	Limits 360-degree customer and supply chain visibility, impacting personalization and agility.
2	Legacy Systems	Some backend systems in supply chain or POS may be outdated, lacking APIs or cloud compatibility.	Reduces agility, hinders real-time integrations, and increases maintenance overhead.
3	Performance Bottlenecks in Data Processing	ETL jobs reliant on older scripts or batch loads can slow down near real-time analytics and data availability.	Impacts timely decision-making and responsiveness to market dynamics.