FutureMart Strengths and Areas for Improvement

1. Scalable Data Architecture

- **Strengths:**
  FutureMart has adopted cloud-based infrastructure, enabling horizontal and vertical scalability. This setup ensures the system can efficiently handle increasing volumes of data, especially during peak seasons and promotions.
- **Areas for Improvement:**
  While scalability is supported, auto-scaling rules and capacity planning policies are not fully optimized. FutureMart should implement predictive scaling and continuous performance testing to anticipate future data loads more effectively.

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2. Data Integration Capabilities

- **Strengths:**
  FutureMart employs robust ETL pipelines and APIs for cross-platform data exchange. These integrations support seamless data flows between e-commerce, in-store systems, and third-party partners, minimizing latency.
- **Areas for Improvement:**
  Integration between legacy systems and new cloud platforms still relies on batch processes in some areas. FutureMart should enhance real-time data syncing and move toward event-driven architecture using tools like Apache Kafka.

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3. Data Governance

- **Strengths:**
  FutureMart has introduced data access policies and compliance frameworks aligned with international standards (e.g., GDPR). Role-based access control (RBAC) and encryption-at-rest are enforced across critical data layers.
- **Areas for Improvement:**
  Data quality monitoring and lineage tracking are not yet automated. FutureMart should invest in data observability platforms to ensure data trustworthiness, traceability, and timely issue resolution.