

FutureMart is a merged entity combining FashionMart's physical retail strength and TrendyThreads' digital innovation. Its goal is to have a unified, scalable, and intelligent enterprise architecture.

Strengths:

1. Unified & Integrated Data Architecture

- **Description:** Combines online and offline data sources into a centralized data warehouse with data lakes and integrated pipelines.
- **Impact:** Facilitates comprehensive analytics, omnichannel customer insights, and streamlined operations.

2. Real-Time Analytics & AI Capabilities

- **Description:** Implements real-time dashboards, AI-driven recommendations, and fraud detection models.
- **Impact:** Enhances customer experience and operational decision-making with timely insights.

3. Cloud-Based & Scalable Infrastructure

- **Description:** Migrated to cloud platforms (AWS, Azure), utilizing scalable storage and processing resources.
- **Impact:** Supports future growth, reduces infrastructure costs, and improves disaster recovery.

Areas for Improvement:

1. Persistent Data Silos

- **Description:** Some departmental data (inventory, customer service) remains isolated despite integration efforts.
- **Impact:** Limits full enterprise visibility, affecting cross-departmental analytics and decision-making.

2. Legacy System Integration Challenges

- **Description:** Some older systems (supply chain legacy modules) still operate separately.
- **Impact:** Causes data latency, inconsistent data quality, and integration complexities.

3. Governance & Data Quality Gaps

- **Description:** While policies are in place, ongoing data quality audits and governance enforcement need strengthening.
- **Impact:** Risks of data inaccuracies, compliance violations, and reduced trust in analytics.

Summary:

FutureMart's architecture is promising with its integrated, scalable, and AI-ready infrastructure. To maximize value, it should focus on eliminating remaining silos, better integrating legacy systems, and strengthening governance policies.