

ASPIRE SYSTEMS · DATABRICKS PARTNER PRACTICE

Retail & Consumer AI on Databricks

From unified customer data to real-time personalization, demand intelligence and autonomous supply chain — Aspire Systems delivers AI-first retail platforms that drive measurable revenue outcomes.

Client Outcome
Global Omnichannel Retailer

+12%

Revenue uplift
achieved

-28%

Inventory carrying cost

94%

SKU-level forecast
accuracy

+22%

SKU-level forecast
accuracy

AI Demand & Personalization Platform
built across 8 markets · Real-time
recommendations · 400-store supply
chain automation



Customer AI &
Personalization

Demand Forecasting
& Supply Chain

AI Data Platform &
Engineering

Mosaic AI
Agentic AI · GenAI



Customer AI & Personalization

Customer 360 Lakehouse

Unified online, in-store and loyalty data across global markets – one governed data estate eliminating silos.

Real-Time Recommendations

Mosaic AI collaborative filtering engines serving personalized product recommendations at scale, live at the point of browse.

Next-Best-Action & CRM Scoring

Churn propensity and next-best-action models powering automated CRM campaign orchestration.

AI-Powered Search & Browse

Vector Search on Databricks driving semantic personalization of search and category browse – relevance at individual level.

Delivered
Outcome

+22%

Cart conversion
improvement via
real-time Mosaic AI
recommendation engine



Demand Forecasting & Supply Chain AI

Hierarchical Demand Forecasting

SKU and store-level forecasting using Databricks AutoML
– 94% accuracy delivered in production across 8 markets.

Dynamic Pricing & Markdown AI

Pricing and markdown optimization models served via Mosaic AI pipelines – reducing margin leakage and overstock.

Agentic Replenishment

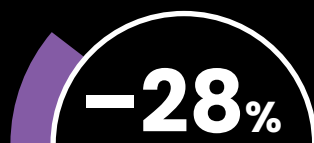
AI-driven autonomous reorder agents on Delta Live Tables – active across 400 stores with human-in-the-loop exception handling.

Supply Chain Exception Agents

Autonomous Agentic AI systems detecting and resolving supply chain exceptions – self-orchestrated on DLT workflows.



Inventory carrying cost reduction via AI demand forecasting at 94% SKU-level accuracy



Delivered Outcome



AI Data Platform & Engineering

Lakehouse Migration via Lakebridge

Legacy Hadoop and data warehouse estates migrated to Databricks Lakehouse – 40% faster, zero data loss guaranteed by automated reconciliation.

Real-Time POS & Clickstream

DLT streaming table architecture ingesting POS and clickstream events at scale – enabling live AI decisioning without warehouse lag.

Loss Prevention & Shrink Detection

Computer vision models on Spark ML detecting shrink patterns and loss prevention signals across store operations.

GDPR / CCPA Governance

Unity Catalog delivering consent management, full data lineage, and GDPR / CCPA compliance as an engineering deliverable.

Delivered Outcome

+12%

Revenue uplift across 8 markets – Customer 360 + real-time AI platform on Databricks



How We **Deliver**

01

Discover & Assess

AI maturity, use case scoring, ROI modelling & Lakehouse blueprint

02

Architect & Design

Unity Catalog, AI model selection & governance framework design

03

Build & Migrate

Agile sprint teams, Lakebridge migration & AI pipeline engineering

04

Deploy & Operate

MLOps rollout, user enablement & 24x7 platform operations

05

Optimize & Scale

Continuous model improvement & new use case onboarding



Aspire Systems — Your Retail AI Partner on Databricks

Personalization · Demand Intelligence
· Supply Chain AI · Unified Lakehouse ·
Governed & AI-Ready from Day One

[Request a discovery call →](#)

About Aspire Systems

Aspire Systems is a global technology services firm serving as a trusted technology partner for our customers. We work with some of the world's most innovative enterprises and independent software vendors, helping them leverage technology and outsourcing in our specific areas of expertise. Our core philosophy of "Attention. Always." communicates our belief in lavishing care and attention on our customer and employees.

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