Revolutionizing Retail Metrics: Unified Store Performance Analytics for Apparel Leader

ORGANIZATION

Our client is a renowned retail apparel chain headquartered in Texas, operating over 1,500 stores across the US and Canada. As a leader in the fashion retail industry, the company has strategically acquired several prominent market players as subsidiaries, further expanding its market presence. The brand offers an extensive range of men's and women's clothing, footwear, tuxedo rentals, and suit-pressing services. Quality, fashion, and innovation are at the heart of every product they deliver. Backed by a robust supply chain and warehouse network, their team of approximately 22,500 employees provides a high-touch, personalized shopping experience, driving loyalty across all their brands.

CHALLENGE

The client sought to revolutionize store performance analytics by creating a comprehensive 360-degree view of critical metrics.

Key areas of focus included:
- **Transaction Metrics:** Counts, financial figures, operational dollars, and discounts.
- **Order Fulfillment:** Counts segmented by status.
- **Workforce Data:** Staff working hours, rates, and efficiency metrics.
- **Sales Insights:** Comparative sales performance, sales area metrics, and planned versus actual sales.

Achieving this ambitious goal required:
- Consolidating disparate data sources, including transaction, inventory, store hierarchy, and customer data, alongside planning and marketing systems.
- Addressing challenges like missing or incomplete data and verifying existing Key Performance Indicators (KPIs).
- Factoring in external influences such as seasonality, holidays, and weather trends by integrating historical weather data from third-party APIs.
- Aligning executives, analysts, and managers to standardize KPI definitions and update relevant documentation.

The client's existing store scorecard logic, built atop core data workflows, required optimization and integration to ensure consistency and scalability.

TECHNICAL SOLUTION

XTIVIA delivered a cutting-edge solution tailored to the client's complex requirements, leveraging advanced technologies and a collaborative approach:

1. **Data Profiling and Consolidation:**
   - Analyzed data attributes, formats, and transformation logic.
   - Identified gaps in the Snowflake data warehouse and raw layers, addressing data quality issues and missing values.
   - Collaborated with source teams to replicate data into the data lake using HVR.
2. **Seamless API Integration:**
   - Developed a generic API workflow to streamline data ingestion into Snowflake.

- ○ Integrated external datasets such as Weatherbit and ShopperTrak, enhancing insights with weather and traffic data.
3. **Target Data Model and ETL Optimization:**
   - ○ Designed a scalable target data model for Store Scorecard aggregates.
   - ○ Optimized ETL workflows for faster data processing and reduced overhead, leveraging Snowflake's advanced features like clustering and materialization.
4. **KPI Standardization:**
   - ○ Conducted collaborative sessions with executives and analysts to refine KPI definitions.
   - ○ Established a flexible data pipeline framework, simplifying the addition of new KPIs.
5. **Proactive Monitoring:**
   - ○ Implemented alert mechanisms for critical KPIs such as store traffic, transaction counts, and sales figures based on predefined thresholds.

BUSINESS RESULT

XTIVIA's comprehensive solution delivered transformative outcomes, including:

Enhanced Store Performance Visibility:
- Unified reporting of critical KPIs such as sales trends, top-selling products, and revenue growth opportunities.

Improved Customer Satisfaction:
- ShopperTrak integration provided actionable insights into store operations, enabling reductions in customer waiting times.

Optimized Forecasting and Resource Allocation:
- Enhanced forecast accuracy empowered operations teams to allocate budgets and resources more effectively.

Inventory Management Excellence:
- Improved visibility into inventory data facilitated accurate decision-making and optimized inventory levels.

This success underscores XTIVIA's ability to transform complex retail operations into data-driven powerhouses, unlocking new opportunities for growth and innovation.

KEYWORDS

ShopperTrak, Weatherbit, API, Data Warehouse, Snowflake, Tableau, Microstrategy, UC4, Python, Oracle, Reporting, API Integration, ETL

SOFTWARE/HARDWARE/PLATFORM

Snowflake, HVR, Oracle, SQL Server, Python, APIs, SFTP, Microstrategy, Tableau, UC4, Unix, AWS, Windows

ABOUT XTIVIA

XTIVIA is a proven technology integration and innovation company known for delivering leading-edge technology solutions to our clients' specific requirements, regardless of project complexity. We bring next-level business operations to reality through Application Development, Business Intelligence, Data Warehousing, Database Support & Management, Enterprise Information Management, Digital Experience Solutions, and Enterprise Resource Planning. Our success stems from a demonstrated ability to deliver deep expertise via professional services, empowering clients to leverage their chosen technology successfully, competitively, and profitably. XTIVIA has offices in Colorado, New York, New Jersey, Missouri, Texas, Virginia, and India. www.xtivia.com