

# DATA OPERATIONS IN RETAIL

https://www.bbinsight.com/

### THE CHALLENGE

Our client knew they had to migrate to the cloud, with a close eye on efficient and scalable data management. They chose Google Cloud for its breadth of tooling and level of security. While migrating, their priorities included:

- Reducing the time-to-market to deliver product innovations.
- Modernizing architecture to enable next-gen delivery capabilities.
- Improving the application release process.

### PROJECT SUMMARY

A leading retail enterprise needed to modernize their data management, while migrating on-prem applications to Google Cloud Platform.

BBI focused on achieving high availability, scalability, reliability, and maintainability of data components. The resulting framework leveraged a variety of Google Cloud tools to build and automated, secure system.

## **OUTCOMES**

- Faster data provisioning: 3 weeks to 2 days
- Significant reduction in on-call events.
- ~70% improvement in Time to Resolution.
- 99.9% platform availability.
- FinOps optimizations resulted in 8ok in yearly savings.

### THE SOLUTION

### **Data Engineering**

- Customer 360 Data Platform, including: performance marketing spends, marketing campaigns, personalized marketing notifications, and customer profiles
- Migration from Teradata to BigQuery

# **Data Modeling**

- Landscape analysis, capacity planning, performance optimization, platform stabilization
- Report rationalization in Cognos and Tableau

### **Data Governance**

Reusable frameworks, using Dataplex for data quality management

## **Data Operations**

- Environment Certification and code refactoring; Composer and Data Fusion upgrades
- Looker billing dashboard, BigQuery deduplication framework, & Cluster build optimization
- Efficient custom CI/CD framework with extensive use of Bash and Google Cloud commands