DQLABS

# Leading American Bank Fuels Growth with Scalable Data Quality and Observability

A leading American bank, and one of the largest full-service financial institutions in the Southeast, this organization manages over $27 billion in assets and operates 200+ offices across six states. Known for its strong customer relationships and commitment to local communities, the bank offers a wide range of services—including personal and business banking, mortgages, wealth management, SBA lending, and equipment finance.
Following recent mergers and system upgrades, the institution continues to scale while maintaining its high-touch service model. It is a multiple-time J.D. Power award winner and was named the most trusted bank in the Southeast in 2025, driven by its focus on innovation, operational excellence, and customer satisfaction.

**Customer Success Story**

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# How the Bank Leverages Data for its Business Operations

- **Operational Efficiency**: The bank processes large volumes of data from digital banking, core banking systems, loan applications, and marketing activities. Efficient data management ensures smooth operations and timely service delivery.
- **Customer Experience:** High-quality data enables personalized financial solutions and award-winning service, which are core to the bank's value proposition.
- **Regulatory Compliance**: As a financial institution, the bank must comply with strict regulations regarding data accuracy, security, and reporting. Data is essential for regulatory filings, risk management, and audit trails.
- **Strategic Decision-Making**: Data analytics empower the organization to make informed business decisions, optimize processes, and identify growth opportunities.
- **Innovation and Growth**: A modern data infrastructure supports the bank's ambition to become more data-driven and innovative, which is critical as it scales and competes in a dynamic market.

# Challenges

The bank faced several data management and quality challenges as it scaled operations and modernized its technology stack:

- **Fragmented Data Landscape**: Data was distributed across multiple systems, with critical business data residing in Snowflake. This fragmentation led to inconsistencies in customer, loan, and transaction data, making it difficult to maintain a single source of truth for analytics and regulatory reporting.
- **Manual Data Quality Processes**: Data quality checks were largely manual and reactive. Teams often discovered issues—such as missing values, schema drift, or data type mismatches—only after they impacted downstream dashboards or compliance reports, resulting in delayed insights and increased operational risk.
- **Limited Visibility into Data Pipelines**: Business and IT users lacked real-time visibility into the health of key data pipelines, especially those feeding regulatory and business intelligence dashboards. This limited their ability to proactively detect and resolve data issues before they affected decision-making.
- **Complex Regulatory Requirements**: The organization needed to ensure data accuracy and completeness for regulatory filings, including those related to lending and risk management. Incomplete or inaccurate data in key pipelines (e.g., BANK_LOAN) posed a risk of non-compliance and potential fines.
- **Scalability and Innovation Barriers**: As the bank accelerated digital transformation, the lack of automated, scalable data quality management hindered the rollout of new data-driven products and analytics use cases.

# Solution

To address these challenges, the bank implemented DQLabs, focusing on deep integration with its Snowflake data warehouse and leveraging advanced features for automated data quality management:

## Snowflake Integration

DQLabs' native Snowflake connector established a direct link to the bank's environment, enabling seamless access to critical assets such as the BANK_LOAN dataset and other core banking data. This allowed for comprehensive profiling and monitoring of all attributes.

## dbt Integration

DQLabs complemented the bank's existing dbt-based data transformation pipeline, providing automated data quality checks and observability for dbt models and outputs as they were processed within Snowflake.

## Advanced Data Profiling

Data teams enabled advanced profiling for all attributes in key Snowflake assets. This provided granular insights into data distributions, outliers, and attribute-level anomalies, helping teams understand and address data quality issues at their source.

## Automated Scheduling and Monitoring

Critical data assets were scheduled to run daily at 12 PM, ensuring that data quality checks and profiling were performed consistently. This automation reduced manual intervention and enabled timely detection of issues.

## Role-Based Access and Governance

A custom role was created within DQLabs, granting users the ability to edit only specific sections (General, Semantics, Measures) and view all asset details. This ensured strong data governance and minimized the risk of unauthorized changes while empowering analysts to act on data quality insights.

## Out-of-Box Dashboards and Observability

The organization leveraged DQLabs' built-in dashboards and modules—Discover, Measure, Observe, and custom features—to monitor data quality metrics, track pipeline health, and visualize trends in real time. These dashboards provided actionable insights for both business and IT stakeholders.

## Proactive Issue Detection

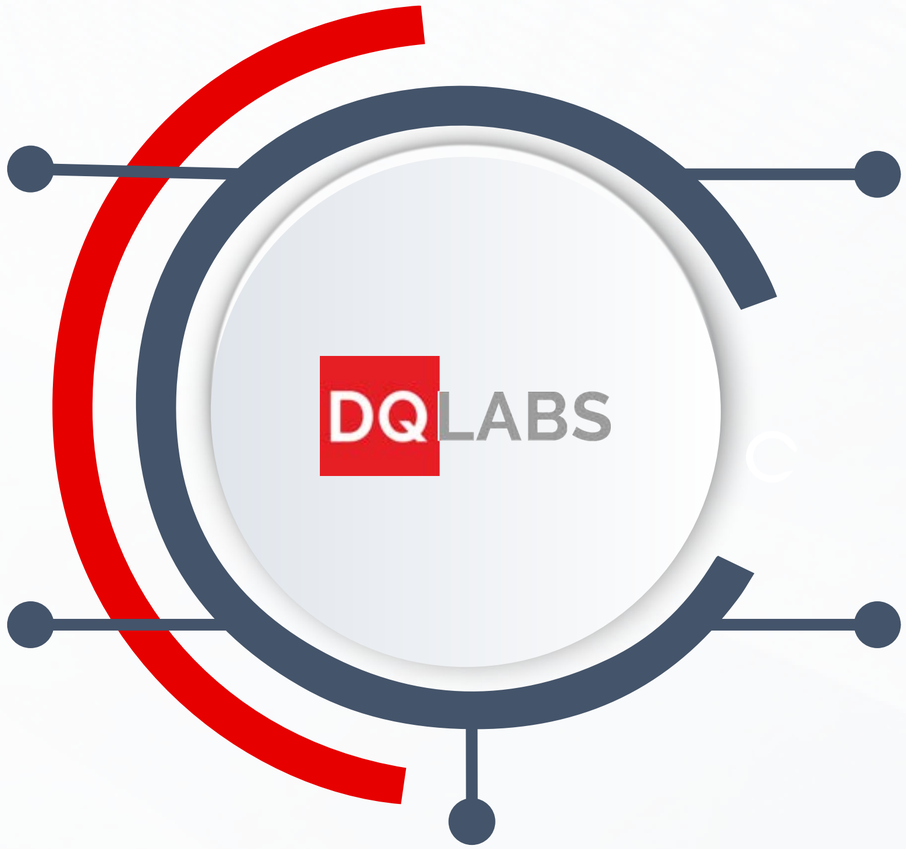
DQLabs' AI-driven anomaly detection and observability features flagged unusual patterns, missing values, and schema changes early in the data pipeline, preventing downstream issues in regulatory and business dashboards.

# Results and Impact

By implementing DQLabs, the bank gained a robust foundation for data trust, resulting in measurable business outcomes:

## Faster Decision-Making

Business leaders and analysts reported a **40% reduction in time-to-insight**, thanks to consistent access to high-quality, trusted data for dashboards and analytics.




## Improved Operational Efficiency

Intelligent automation and anomaly detection reduced manual data issue triage by **over 60%**, enabling data teams to focus on value-added work instead of firefighting.

## Enhanced Customer Experience

Clean, complete, and timely customer data enabled more personalized service delivery, contributing to **a 20% improvement in customer satisfaction scores** tied to digital interactions.

## Stronger Compliance Posture

With audit-ready logs and proactive governance, the organization achieved a **75% improvement in regulatory data accuracy**, significantly reducing the risk of non-compliance and costly reporting errors.

## Future-Ready Data Strategy

The bank now supports scalable innovation initiatives—rolling out new data-driven products and analytics use cases 2x faster than before, without compromising governance or trust.

# About DQLabs

DQLabs is an Agentic AI Data Observability & Data Quality Platform that enables organizations to observe, measure, discover, and remediate the data that matters. With an automation-first approach and self-learning capabilities, the DQLabs platform harnesses the combined power of Data Observability, Data Quality, and Data Discovery to enable data producers, consumers, and leaders to turn data into action faster, easier, and more collaboratively.

**Book a Demo**

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