Case Study

Ensuring Data Reliability in High-Stakes Banking Operations

About the Client

Valued at around **$8 billion**, this UAE-based private bank is one of the oldest financial institutions in the Middle East, known for its legacy, international presence, and focus on digital and regulatory excellence.

Business Requirements

The bank's enterprise data warehouse, responsible for powering daily and monthly reporting across teams, faced a high-severity issue:

- A week's worth of transaction data (LOGFN table) was partially loaded, causing gaps in key reports used by 15+ business and reporting teams.
- The issue was identified late during reconciliation, raising the risk of penalties from the central bank.
- The problem stemmed from a mismatch between data precision and field structure, causing critical transaction numbers to load as null values.
- Urgent action was required to fix the root issue, restore missing data, and prevent downstream reporting failures.

Our Solution

Our production support team immediately prioritized the incident and initiated a deep-dive root cause analysis.

- The investigation revealed that the **TRN_NO field** was failing due to data values exceeding the INTEGER limit. We reconfigured the field type to **VARCHAR(20)** across Informatica mappings, SQL scripts, and all dependent objects to support larger values.
- A comprehensive rollback and recovery plan was executed: **7 days of historical transaction data** were restored from NetBackup and reprocessed through the DWH ODS system, followed by validation from downstream teams.
- We recreated all **LOGFN-related views**, ensured dependencies were intact, and tested end-to-end data flows. The fix was deployed to production through standard change management procedures, and full resolution was achieved within 5 hours.
- Preventive measures were also put in place, including **validation checks and schema reviews**, to avoid similar precision-related failures in the future.

Business Outcomes

- **Regulatory Risk Avoided:** Resolved the issue before any regulatory breach occurred, preventing potential penalties.
- **Data Restored Seamlessly:** Recovered and reloaded 7 days of missing transaction data without disrupting daily operations.
- **System Stability Improved:** Strengthened the overall data load process to prevent similar issues in the future.
- **Reduced Downtime:** Rapid troubleshooting and deployment minimized impact on business users.
- **Trusted Reporting:** Teams regained full confidence in the accuracy and completeness of their reporting systems.