

# Project Case Study — Sales Performance Dashboard

Power BI · SQL · Excel · DAX · Power Query

October 2025 — Analysis of 50,000+ transactions to accelerate reporting, reduce manual work, and surface regional & product insights.

## 50K+ Transactions

Full transaction history ingested for comprehensive analysis.

## 25% Efficiency Gain

Faster reporting cadence through automation and optimized measures.

## 40% Time Saved

Reduction in manual processing via scheduled ETL and refresh.





# Project Overview

The objective was to design an interactive Power BI dashboard to enable data-driven decisions across regions, revenue trends, and product categories. Scope included ETL automation, data modeling, DAX measures, and stakeholder delivery.

## Business Challenge

Manual reporting was slow, error-prone, and lacked real-time visibility into regional and category performance.

## Technical Solution

Automated ETL with Power Query, star-schema modeling, and advanced DAX for dynamic KPIs; scheduled refresh and role-level security for controlled delivery.

## Business Impact

Identified underperforming regions and prioritized actions that led to measurable operational improvements.

# Technical Architecture

End-to-end architecture supports automated ingestion, transformation, modeling, calculation, and interactive reporting for rapid analysis of >50K records.

## Raw Data Sources

Excel / CSV / SQL — consolidated as the single source of truth.

## Power Query ETL

Cleaning rules, joins, and incremental refresh to eliminate manual prep (40% time savings).

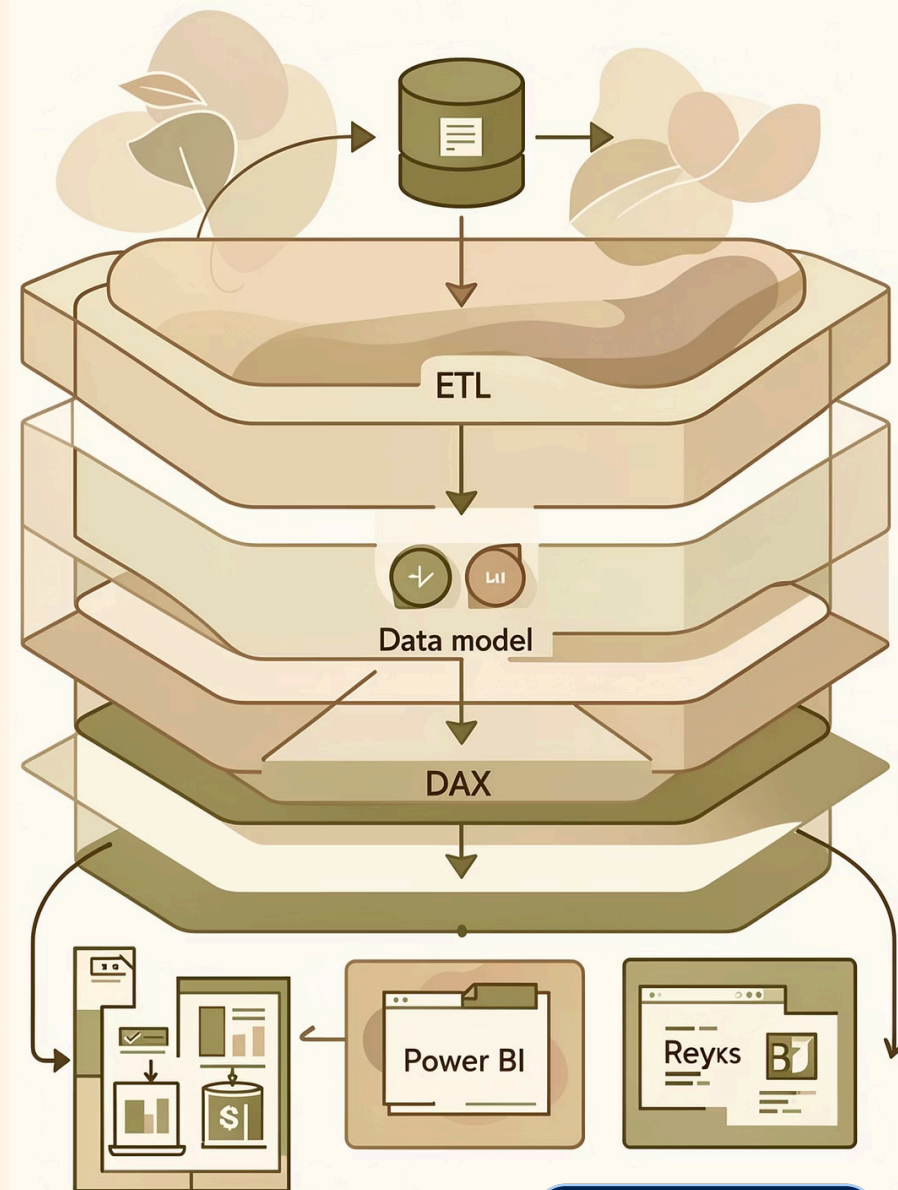
## Star Schema

Fact and dimension tables optimized for performance across large datasets.

## DAX & Reporting

Custom measures for YoY, moving averages, retention; interactive visuals in Power BI with RLS.

Scheduled refresh and role-level security ensure stakeholders see timely, relevant data.





Transactions

Revenue  
Gain

\$0.9%



GPI

Efficiency  
Improvement

438%



Time Saved

482

\$5063%

## Key Metrics & Results

50K+

Sales transactions analyzed — comprehensive coverage across regions and categories.

25%

Improvement in reporting efficiency through automated dashboards and reusable measures.

40%

Reduction in manual processing time due to ETL automation and refresh workflows.

### Implemented DAX Measures

- YoY Revenue Growth Rate
- 30/60/90-day Moving Averages
- Customer Retention & Churn
- Regional Contribution %
- Product Category Margin Analysis

# Dashboard Features



## Revenue Trend Analysis

Time-series visuals with YoY overlays and rolling averages to detect trends and seasonality.



## Regional Performance Map

Geographic drill-downs highlight top and underperforming markets for targeted action.



## Product Category Insights

Category-level margin and volume analysis to inform pricing and inventory strategy.



## Automated Data Refresh

Scheduled Power Query refreshes keep dashboards current without manual intervention.

Advanced KPIs and stakeholder-facing reports enable rapid, actionable decisions.



## Skills Demonstrated

90%

Power BI — Visualization

Interactive dashboards, drill-throughs, and role-level security.

85%

DAX — Analytics

YoY, moving averages, retention metrics and business-ready measures.

80%

Power Query (M) — ETL

Multi-source ingestion, cleaning, and automation for reliable pipelines.

85%

SQL — Data

Extraction, joins, and baseline transformations for performant models.

80%

Excel — Analysis

Source data handling and validation during development.

85%

Data Storytelling — Soft Skill

Clear stakeholder communication and actionable recommendations.

# Project Summary — Delivering Data-Driven Decision Making

This engagement delivered end-to-end BI ownership: automated ingestion, a performant star-schema model, advanced DAX analytics, and stakeholder-ready reporting that enabled strategic action.

## Operational Impact

Automated pipelines reduced manual effort by 40% and shortened reporting cycles.

## Analytical Value

Advanced DAX measures improved reporting efficiency by 25% and surfaced high-impact insights.

## Business Outcomes

Stakeholder recommendations prioritized underperforming regions and informed inventory and pricing decisions.