SuperStore Sales Dashboard – End-to-End Process & Analysis

1. Business Objective

The objective of this dashboard is to provide a comprehensive performance overview of the SuperStore business by analyzing:

- Overall Sales, Profit, and Return Percentage
- Year-over-Year (YoY) comparison with Previous Year (PY)
- Performance by Region, State, Category, Sub-Category, and Product

Identification of:

- High-profit and loss-making products
- Regions and categories with high return rates
- Monthly sales trends and seasonality

This dashboard supports data-driven decision making for sales, operations, and supply-chain optimization.

1. Data Understanding

Fact Table: Orders

Key columns used:

- Sales, Profit, Quantity, Discount
- Order Date, Ship Date
- Category, Sub-Category, Product Name
- Region, State/Province, City
- Ship Mode
- Order ID, Customer ID

Dimension Table: Date Table

Key columns:

- Date
- Year
- Month
- Start of Month

A dedicated Date table is required to enable time-intelligence calculations.

1. Data Preparation (Power Query)

Steps performed in Power Query Editor:

- Removed null values from critical fields such as Sales, Profit, and Order Date
- Removed error rows from numeric columns

Assigned correct data types:

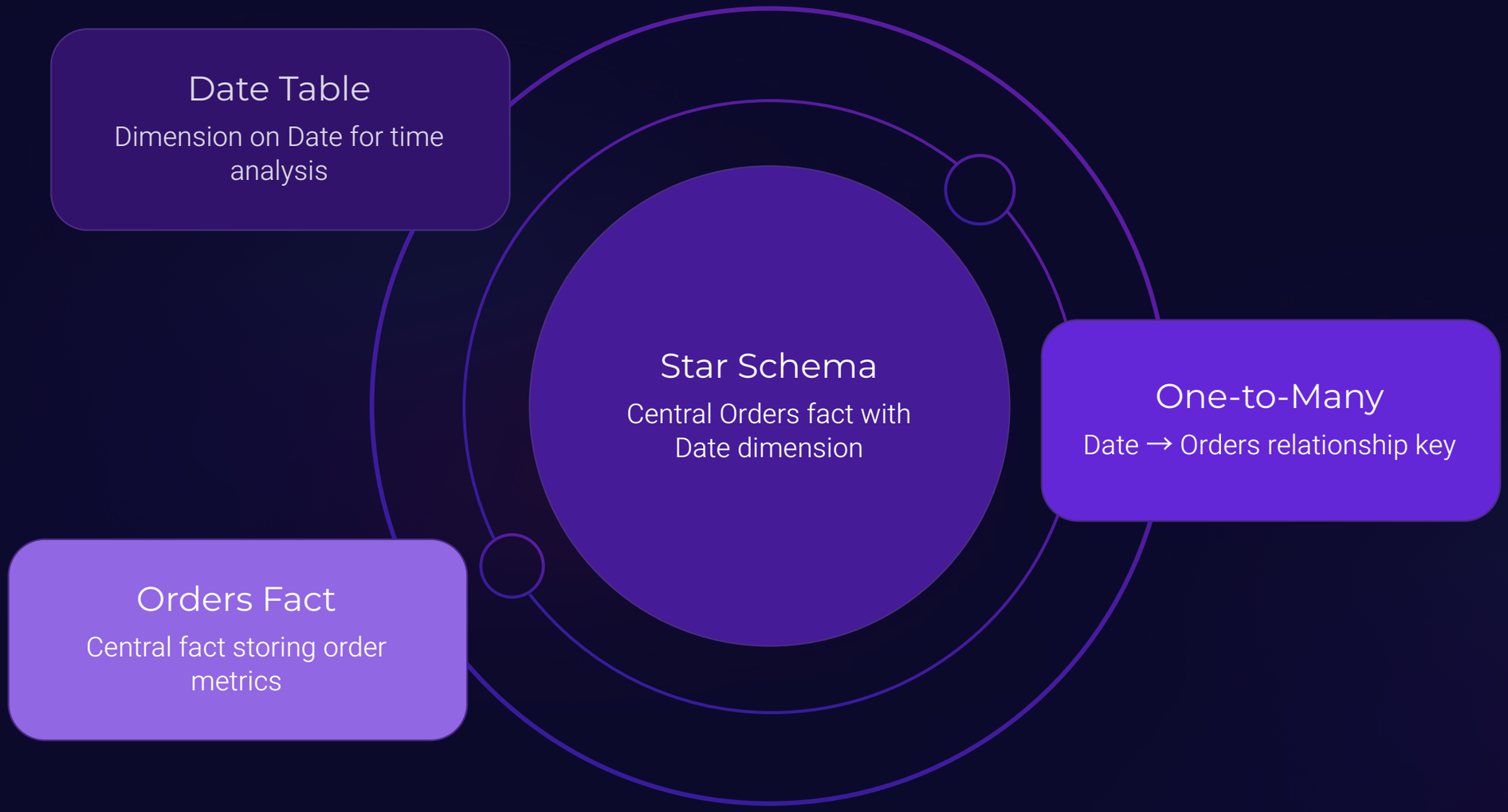
- Sales, Profit → Decimal
- Quantity → Whole number
- Date fields → Date

Created derived columns:

- Year
- Month
- Start of Month

Loaded clean data into the data model

1. Data Modeling



- Relationship created:
- Date Table[Date] → Orders[Order Date] (One-to-Many)
- Date table marked as Date Table
- Star schema followed for better performance and scalability

1. Key Measures (DAX)

Base Measures

Sales = SUM(Orders[Sales])

Profit = SUM(Orders[Profit])

Returned Orders = DISTINCTCOUNT(Orders[Order ID])

Return Percentage

% Returned Orders = DIVIDE([Returned Orders], DISTINCTCOUNT(Orders[Order ID]))

Previous Year (PY) Measures

Sales PY = CALCULATE([Sales], SAMEPERIODLASTYEAR('Date Table'[Date]))

Profit PY = CALCULATE([Profit], SAMEPERIODLASTYEAR('Date Table'[Date]))

Returned Orders PY = CALCULATE([Returned Orders], SAMEPERIODLASTYEAR('Date Table'[Date]))

Year-over-Year (Vs PY) Measures

Vs PY - Sales = DIVIDE([Sales] - [Sales PY], [Sales PY])

Vs PY - Profit = DIVIDE([Profit] - [Profit PY], [Profit PY])

Vs PY - % Returned Orders = DIVIDE([% Returned Orders] - [% Returned Orders PY], [% Returned Orders PY])

1. Visuals and Their Purpose

1

KPI CARDS

- Total Sales
- Total Profit
- Return Percentage
- Previous Year values and YoY change

Purpose: Provides an instant high-level snapshot of business performance.

2

SALES VS PREVIOUS YEAR OVER TIME (LINE/AREA CHART)

- X-Axis: Start of Month
- Values: Sales and Sales PY

Purpose: Tracks monthly trends, growth patterns, and seasonality while comparing current year performance with the previous year.

3

PROFIT BY STATE (MAP VISUAL)

- Location: State/Province
- Size: Profit

Purpose: Identifies high-profit and loss-making states geographically.

4

RETURN PERCENTAGE BY REGION

- Regions: South, Central, East, West

Purpose: Highlights operational or logistical issues by identifying regions with high return rates.

5

SALES BY SHIP MODE (DONUT CHART)

- Standard Class
- Second Class
- First Class
- Same Day

Purpose: Analyzes customer preference for shipping methods.

6

RETURN PERCENTAGE BY CATEGORY

- Technology
- Furniture
- Office Supplies

Purpose: Identifies categories with higher return risk.

7

PROFIT BY PRODUCT / SUB-CATEGORY (COLUMN CHART)

- X-Axis: Sub-Category
- Y-Axis: Profit

Purpose: Identifies high-performing and loss-making product segments.

8

PROFIT BY CATEGORY AND SUB-CATEGORY (TREEMAP)

Purpose: Shows hierarchical contribution of sub-categories within each category.

1. Interactivity and Filters

- Date slicer using Start of Month
- Cross-filtering enabled across all visuals
- Dynamic updates based on user selections

1. Dashboard Analysis & Insights

Sales Performance

- Strong overall sales growth
- Approximately 47% YoY increase, indicating business expansion

Profitability

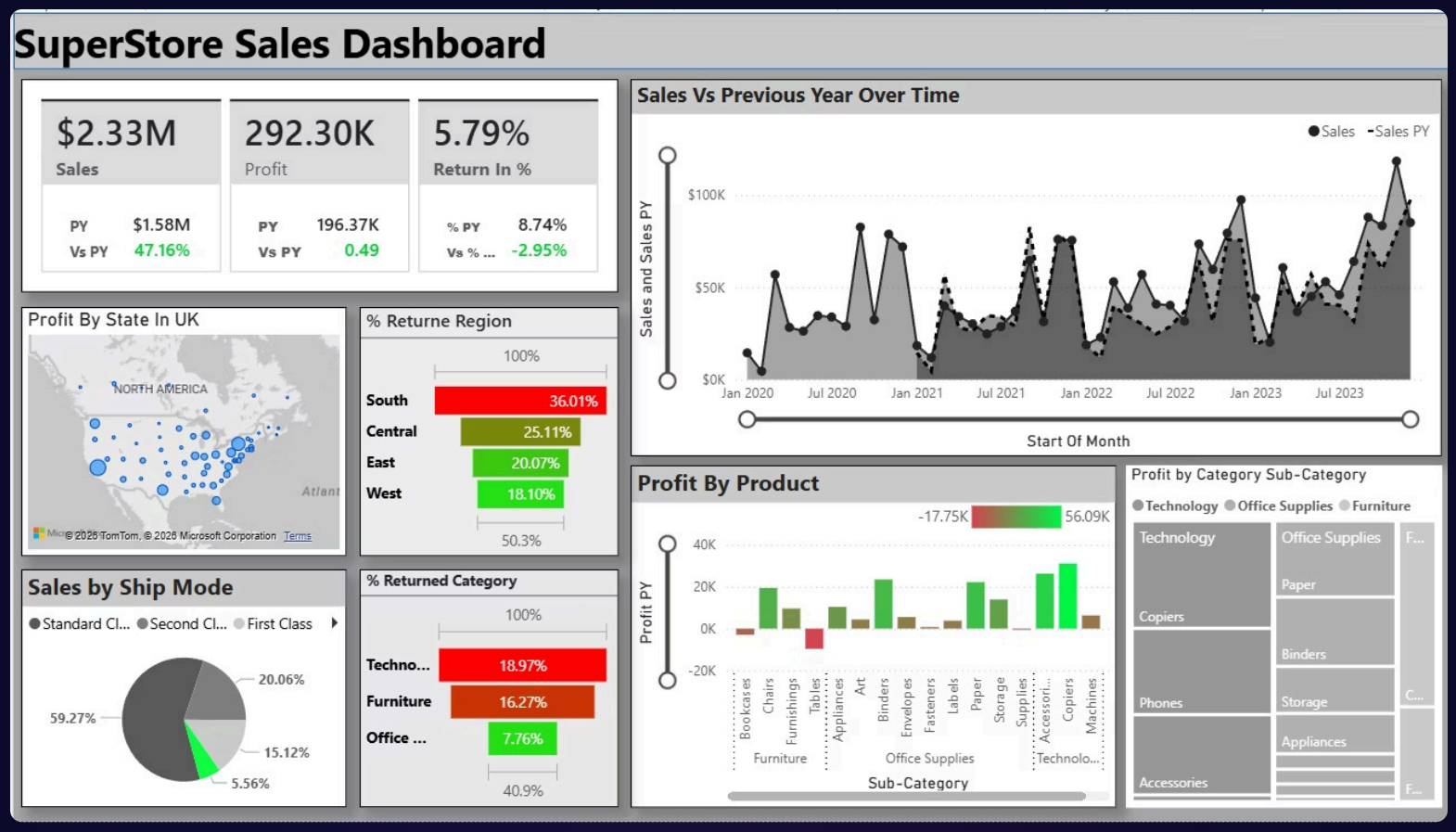
- Overall profit is positive
- Some sub-categories (e.g., Tables, Bookcases) generate losses and require cost or pricing review

Returns Analysis

- Return percentage has reduced compared to the previous year, which is a positive sign
- South region and Technology category show relatively higher return rates

Shipping Insights

- Standard Class dominates total sales
- Same-Day shipping has minimal contribution, suggesting limited demand or higher cost



Overview
High-level snapshot of metrics

Real-time Feed
Live updates and alerts

Key KPIs
Top performance indicators

Trends
Historical patterns and insights

Segments
Filter by user groups

Customization
Personalize layout and widgets

Reports
Exportable summaries and charts

Access Control
Manage user permissions

1. Conclusion

This SuperStore Sales Dashboard delivers a holistic and interactive analytical view of sales, profit, and return performance. By leveraging Power BI data modeling, DAX time-intelligence functions, and interactive visuals, the dashboard enables stakeholders to monitor trends, identify risk areas, and make informed strategic decisions.