



Super Store Sales Dashboard

Professional Report

4

KEY PERFORMANCE
INDICATORS

7

ANALYTICAL
VISUALIZATIONS

**2019-
2020**

DATA COVERAGE

Report Prepared: 2023

Business Intelligence Team

Dashboard Components & Architecture

Key Performance Indicators

Total Orders

Aggregate count of all customer orders

Total Profit

Net profit after cost considerations

Total Sales

Revenue generated across all transactions

Average Ship Days

Mean time between order placement and delivery

Visual Analytics Structure

Donut Charts (3)

Sales by Payment Mode Sales by Region Sales by Customer Segment

Line Charts (2)

Monthly Sales Trend (2019-2020)
Monthly Profit Trend

Clustered Bar Charts (2)

Sales by Category
Sales by Sub-Category

Data Processing & Quality Management

Data Cleaning Process

Initial Data Assessment

- Imported raw sales data from source system
- Checked for duplicate records using Order ID
- Identified missing values in critical columns
- Validated data types for all fields

Data Quality Issues

Missing Values:	Data Types:	Outliers:
• Postal Code: "Unknown"	• Order Date: Date format	• Negative profit: Returns
• Ship Date: 0.3% removed	• Ship Date: Date format	• Extreme sales: Validated

Data Transformation

- Created Ship Days column: Ship Date - Order Date
- Extracted Year and Month from Order Date
- Standardized Region names (removed trailing spaces)
- Standardized Payment Mode categories
- Created Month-Year column for time series analysis

Star Schema Data Modeling

Dim_Date

PK Date_ID
Year, Quarter, Month, Month_Name, Day, Week

Sales_Fact

PK Order_ID
Customer_ID (FK) **Product_ID** (FK)
Customer_Name, Country, State, City
Date_ID (FK) **Region_ID** (FK)

Dim_Customer

PK Customer_ID
Customer_Name, Country, State, City

Dim_Region

PK Region_ID
Region_Name

Advanced Analytics & DAX Calculations

Core KPI Measures

Total Orders

```
Total Orders = COUNTROWS(Sales_Fact)
```

Total Sales

```
Total Sales = SUM(Sales_Fact[Sales_Amount])
```

Total Profit

```
Total Profit = SUM(Sales_Fact[Profit_Amount])
```

Average Ship Days

```
Avg Ship Days = AVERAGE(Sales_Fact[Ship_Days])
```

Advanced Analytical Measures

Profit Margin

```
Profit Margin % = DIVIDE([Total Profit], [Total Sa
```

Year-over-Year Growth

```
YOY Sales Growth % = VAR CurrentYearSales = [Total  
VAR PreviousYearSales = CALCULATE([Total Sales], D  
RETURN DIVIDE(CurrentYearSales - PreviousYearSales
```

Sales by Payment Mode

```
Sales by Payment = CALCULATE([Total Sales], ALLSEL
```

Sales by Region

```
Sales by Region = CALCULATE([Total Sales], ALLSEL
```

Time Intelligence Measures

Monthly Sales (2019)

```
Sales 2019 = CALCULATE([Total Sales], Dim_Date[Yea
```

Monthly Sales (2020)

```
Sales 2020 = CALCULATE([Total Sales], Dim_Date[Yea
```

Monthly Profit (2019)

```
Profit 2019 = CALCULATE([Total Profit], Dim_Date[Y
```

Monthly Profit (2020)

```
Profit 2020 = CALCULATE([Total Profit], Dim_Date[Y
```

Month-over-Month Growth

```
MoM Sales Growth % = VAR CurrentMonth = [Total Sal  
VAR PreviousMonth = CALCULATE([Total Sales], DATEA  
RETURN DIVIDE(CurrentMonth - PreviousMonth, Previ
```

Business Insights & Future Roadmap

Key Analytical Capabilities

- Payment Analysis:** Identify most profitable payment methods
- Regional Performance:** Compare sales across geographical regions
- Segment Analysis:** Understand customer segment contributions
- Temporal Trends:** Track performance evolution over 24 months
- Product Performance:** Evaluate category and sub-category performance
- Operational Efficiency:** Monitor shipping performance through average ship days

Business Value Proposition

Strategic Planning

Year-over-year comparisons inform forecasting

Operational Optimization

Shipping metrics identify bottlenecks

Customer Insights

Segment analysis enables targeted marketing

Product Management

Category performance guides inventory decisions

Financial Planning

Profit trends support budgeting and resource allocation

Future Roadmap

Additional Metrics

- Customer Lifetime Value (CLV)
- Product Return Rate
- Average Order Value (AOV)
- Customer Acquisition Cost (CAC)

Advanced Features

- Predictive analytics for sales forecasting
- Anomaly detection for unusual patterns
- What-if analysis for scenario planning
- Real-time data refresh capabilities

Expanded Visualizations

- Geographic heat maps for regional performance
- Customer cohort analysis
- Product affinity analysis
- Seasonal trend decomposition