

Super Store Data Analysis



Meet The Insight Seekers

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Project Goals: Unlocking Super Store Potential

Our analysis aims to provide actionable insights into key business areas, optimising performance and informing strategic decisions.

Sales Performance

Identify high-profit vs. low-profit products.

Customer Behaviour

Analyse customer segments for targeted strategies.

Regional Insights

Understand performance across different regions.

Shipping Efficiency

Study delivery delays and logistics.

Decision Support

Build interactive dashboards.

Data Set

Initially, the dataset presented no missing values or duplicates. Our focus shifted to enhancing its analytical power through feature engineering.

Dataset Shape

Original: (9800, 21) No missing values or duplicates detected initially.



Data Transformation & Cleaning: Adding New Columns

- 1 Profit per Unit
- 2 Order Month & Year
- 3 Delivery Days
- 4 Cost per Unit
- 5 Total Profit

Understanding the Super Store Dataset

- ❏ The raw dataset, though comprehensive, necessitated significant data transformation and the creation of new calculated fields to unlock its full analytical potential.

Key Data Points Included:

- Unique Identifiers (Row ID, Order ID, Customer ID, Product ID)
- Date & Time (Order Date, Ship Date, Order Month, Order Year)
- Customer Demographics (Customer Name, Segment, Country, City, State, Postal Code, Region)
- Product Details (Category, Sub-Category, Product Name)
- Sales & Profit Metrics (Sales, Quantity, Cost, Profit per Unit, Total Profit)
- Shipping Logistics (Ship Mode, Delivery Days, Cost per Unit, Selling Price per Unit)

Data Modeling – Super Store Analytics

Model Type: Star Schema

This presentation outlines a robust data model for Super Store analytics, focusing on a Star Schema design to enable powerful insights. We delve into the FactSales table, its associated dimensions, and critical DAX measures. This information is tailored for a Data Analysis and Business Intelligence Review Panel.



The Core: FactSales Table

The FactSales table serves as the central pillar of our data model, capturing the granular transactional data from every sale within the Super Store. It is designed for efficiency and comprehensive reporting.

Key Columns within FactSales:

- Sales
- Cost
- Cost Per Unit
- Customer ID
- Delivery Days
- CountryID (from DimCountry)
- SegmentID (from DimSegment)
- ShipmodeID (from DimShipmode)
- Order Date
- Order ID
- Order Month
- Order Year
- Postal Code
- Product ID
- Profit per unit
- Quantity
- Row ID

Dimensional Insights: Enriching Our Data

Dimension tables provide the contextual attributes that allow us to slice, dice, and filter our factual data, turning raw numbers into meaningful business intelligence. Each dimension offers a unique lens through which to view sales performance.



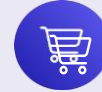
DimCustomer

Customer ID, Customer Name



DimDate

Date, Month, Quarter, Year



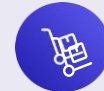
DimProduct

Product ID, Category, Sub-Category



DimSegment

Segment, SegmentID



DimShipmode

Ship Mode, ShipmodeID

Geographical Distribution Overview

- **Total Sales:** Overall revenue generated across all regions.
- **Total Profit:** Net profit achieved from all transactions.
- **Number of Orders:** Volume of customer purchases.
- **Average Profit per Customer:** Profitability on a per-customer basis.
- **Number of Customers:** Total active customer base.



Product Performance Analysis

Average Profit Margin

Percentage of profit from sales.

Total Cost

Overall expenditure on products.

Total Revenue

Gross income from all product sales.

Average Sales per Product

Mean sales volume for each item.

Average Profit per Product

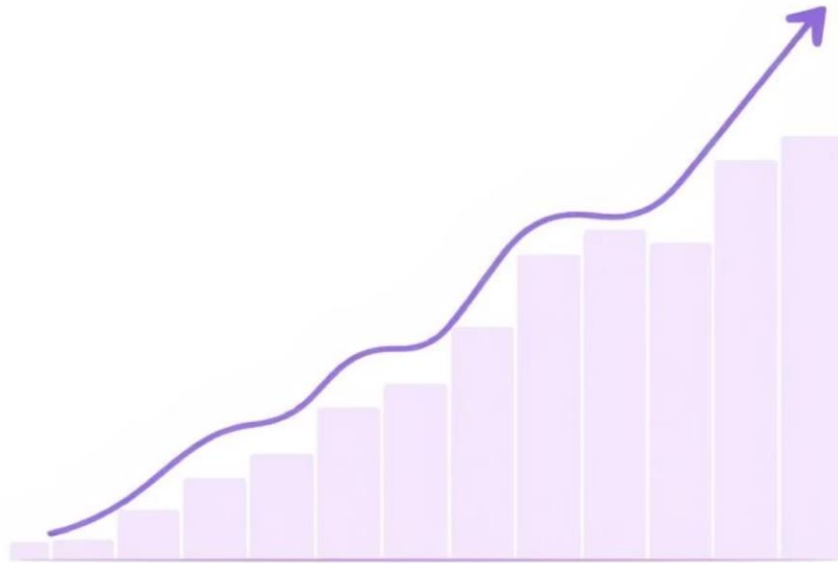
Mean profit generated by each product.

Worst Product by Sales

Identify underperforming products.



Overall Sales Performance



Total Revenue

It's generated gross

Total Profit

Net earnings after costs.

Average Order
Value

Mean value per order.

Shipment & Delivery Analysis



Total Shipments

Volume of all dispatched orders.



Orders per Ship Mode

Breakdown by delivery method.



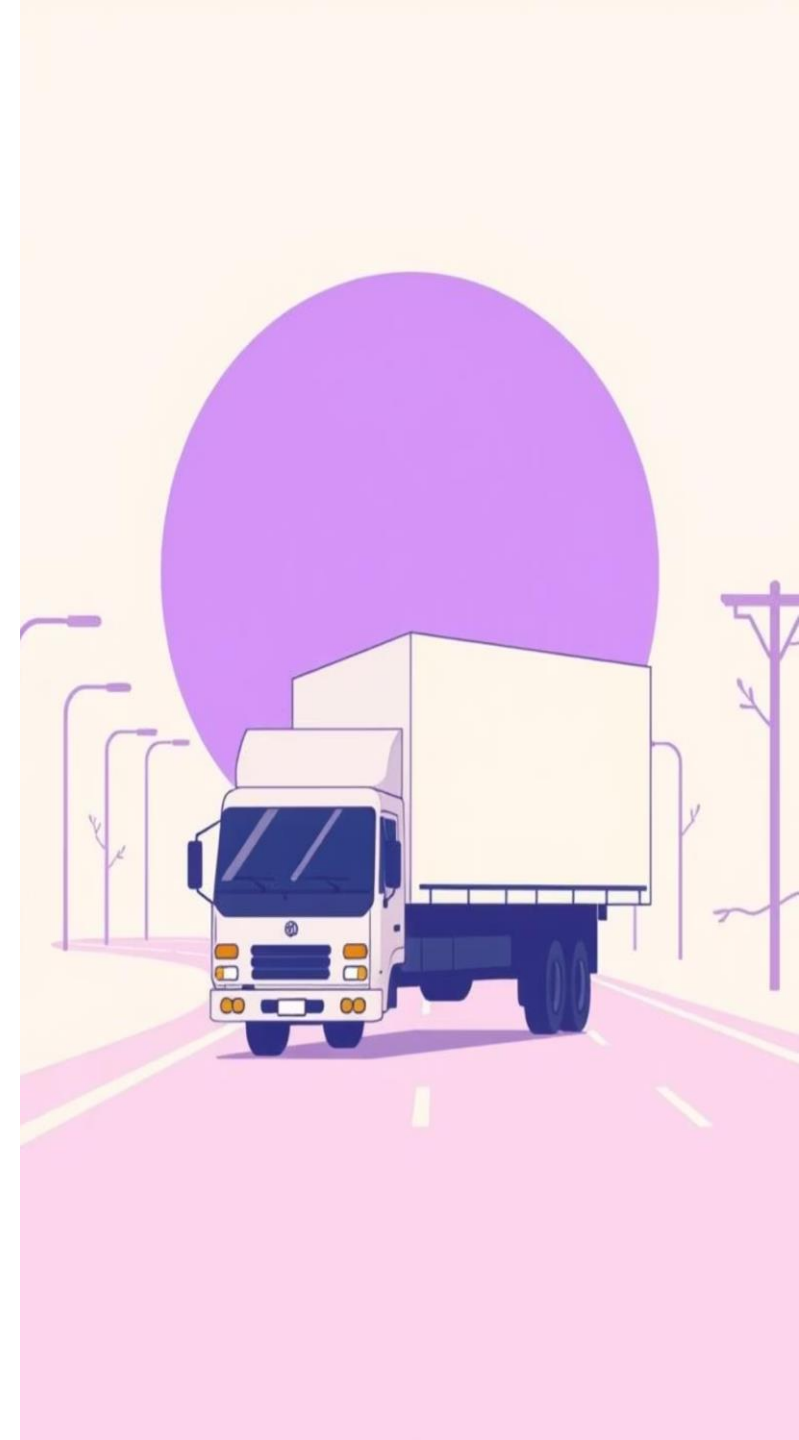
Average Sales per Ship Mode

Revenue generated by each mode.



Average Delivery Days

Typical transit time for orders.



Thank You

Your Time and Attention

We sincerely appreciate you joining us today for this Superstore Analysis Project presentation. Your engagement is invaluable.

Insights and Recommendations

We hope the insights and recommendations derived from our comprehensive data analysis will prove beneficial to your strategic decisions.

Questions and Further Discussion

Please do not hesitate to ask any questions you may have. We are also available for further discussion and collaboration at your convenience.

