SUPERSTORE DATA ANALYSIS

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🔎 Problem Statement

The **Superstore dataset** contains sales transactions from 2011–2015 across multiple markets, regions, and product categories.

Key challenges include:

Understanding **sales trends** 📊 across geographies, time, and customer segments.

Identifying **profitability issues** 💸, e.g., high discounts leading to negative profits.

Evaluating **shipping costs & delivery times** 🚚 and their impact on profit.

Optimizing **product performance** 📦 by analyzing categories, sub-categories, and regions.

Managing **customer segmentation & loyalty** 👥 for targeted strategies.

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📊 **Data Overview (2011–2015 Superstore)**
✨ **Dataset Size**: 51,290 rows × 24 columns
📦 **Product Coverage**: 3 main categories (Office Supplies, Furniture, Technology)
🌍 **Markets**: Africa, APAC, EMEA, LATAM, US, EU
👥 **Segments**: Consumer, Corporate, Home Office

📌 **Key Points (with Emojis)**
🧾 **Row ID** → Unique transaction identifier
🧾 **Order ID** → Tracks each customer's order
🗓️ **Dates** → Order & Shipping for delivery performance
🚚 **Ship Mode** → Standard, Second Class, etc.
🧍 **Customer Info** → ID, Name, Segment
🏙️ **Location Data** → City, State, Country, Market, Region

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🛒 **Product Info** → ID, Name, Category, Sub-category
💵 **Sales** → Revenue from sale
📦 **Quantity** → Number of items sold
🎟️ **Discount** → Applied discount (%)
📈 **Profit** → Profit/Loss from sale
🚚 **Shipping Cost** → Logistic cost
🔥 **Order Priority** → Urgency (Low, Medium, High, Critical)

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Superstore dataset

```
CREATE TABLE superstore_sales (
    Row_ID INT PRIMARY KEY,
    Order_ID VARCHAR(50),
    Order_Date DATE,
    Ship_Date DATE,
    Ship_Mode VARCHAR(50),
    Customer_ID VARCHAR(50),
    Customer_Name VARCHAR(255),
    Segment VARCHAR(50),
    City VARCHAR(100),
    State VARCHAR(100),
    Country VARCHAR(100),
    Postal_Code INT NULL,
    Market VARCHAR(50),
    Region VARCHAR(50),
    Product_ID VARCHAR(50),
    Category VARCHAR(50),
    Sub_Category VARCHAR(50),
    Product_Name VARCHAR(255),
    Sales DECIMAL(10,2),
    Quantity INT,
    Discount DECIMAL(5,2),
    Profit DECIMAL(10,2),
    Shipping_Cost DECIMAL(10,2),
    Order_Priority VARCHAR(50)
);
```

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1. Find total sales for superstore dataset

```
select round(sum(sales),2)as total_sale
 from `superstore_dataset2011-2015`;
```

total_sale
12617751

2. Find total profit for superstore dataset

```
select  round(sum(profit),2)as total_profit
from `superstore_dataset2011-2015`;
```

total_profit
1463918.02

3. Find top product based by sales and profit

```
select `product name`,sum(sales),
sum(profit) from `superstore_dataset2011-2015`
group by `product name` order by sum(sales) desc limit 1;
```

product name	sum(sales)	sum(profit)
Apple Smart Phone, Full Size	86935.7786	5921.5786

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4. Find Profitability as per Category

```
select category,sum(profit) as gross_profit
 from `superstore_dataset2011-2015` group by category;
```

category	gross_profit
Office Supplies	516472.9199
Furniture	283734.2222
Technology	663710.8817

5. Find sales as per category

```
select category,sum(sales) as sales
from `superstore_dataset2011-2015` group by category;
```

category	sales
Office Supplies	3771526
Furniture	4101921
Technology	4744304

6. Find total customers

```
select distinct(count(`customer Name`)) as total_customers
from `superstore_dataset2011-2015`;
```

total_customers
50990

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7.Find top 10 customers by sale

```
select distinct(`customer Name`) as customers
from `superstore_dataset2011-2015`;
```

customers	sales
Tom Ashbrook	40488.07
Tamara Chand	37422.96
Greg Tran	35550.95
Christopher Conant	35187.08
Sean Miller	35170.93
Bart Watters	32310.45
Natalie Fritzler	31781.26
Jane Waco	30288.45
Hunter Lopez	30243.57
Sanjit Engle	30146.34

8.Find 10 top countries by sale

```
select Country,round(sum(sales),2) as sales  from `superstore_dataset2011-2015
group by country order by round(sum(sales),2) desc ;
```

Country	sales
United States	2272449.86
Australia	925235.85
France	858931.08
China	700562.03
Germany	628840.03
Mexico	622590.62
India	589650.1
United Kingdom	528576.3
Indonesia	404887.5
Brazil	361106.42
Italy	289709.66
Spain	287146.68

9.Find the loss making cities

```
select city,sum(profit) from `superstore_dataset2011-2015` group by city having
sum(profit) like '-%' order by sum(profit);
```

city	sum(profit)
Lagos	-25922.511
Istanbul	-19960.908
Tegucigalpa	-15007.41608
Philadelphia	-13732.3392
Lahore	-13626.372
Stockholm	-11632.89
Manila	-11158.5615
Kano	-10916.211
Hanover	-10440.165
Toulouse	-10382.2215
Houston	-10044.3023
Ankara	-8604.276
Buenos Aires	-8567.88556

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10.Find Top Loss-making products (due to heavy discounts)

```
select `Product Name`,sum(profit) as profit,sum(discount) as discount
from`superstore_dataset2011-2015` group by `Product Name`
having sum(profit) like '-%' order by sum(discount) desc ;
```

Product Name	profit	discount
Smead File Cart, Single Width	-237.6692	13.06
Smead File Cart, Blue	-1380.9969	8.48
Hon Removable Labels, Adjustable	-62.3925	7.84
Stockwell Staples, 12 Pack	-18.0756	7.84
Tenex Shelving, Blue	-725.5046	7.84
Sanford Canvas, Water Color	-497.59	7.7
Stockwell Push Pins, Metal	-18.7654	7.65
Rogers Lockers, Wire Frame	-901.5735	7.57
OIC Rubber Bands, Bulk Pack	-46.9069	7.41
Ikea Library with Doors, Pine	-277.9512	7.37
Kleencut Box Cutter, High Speed	-283.096	7.17
Eldon Lockers, Blue	-2181.0964	7.17
Boston Sketch Pad, Water Color	-826.5304	7.15

Visuals

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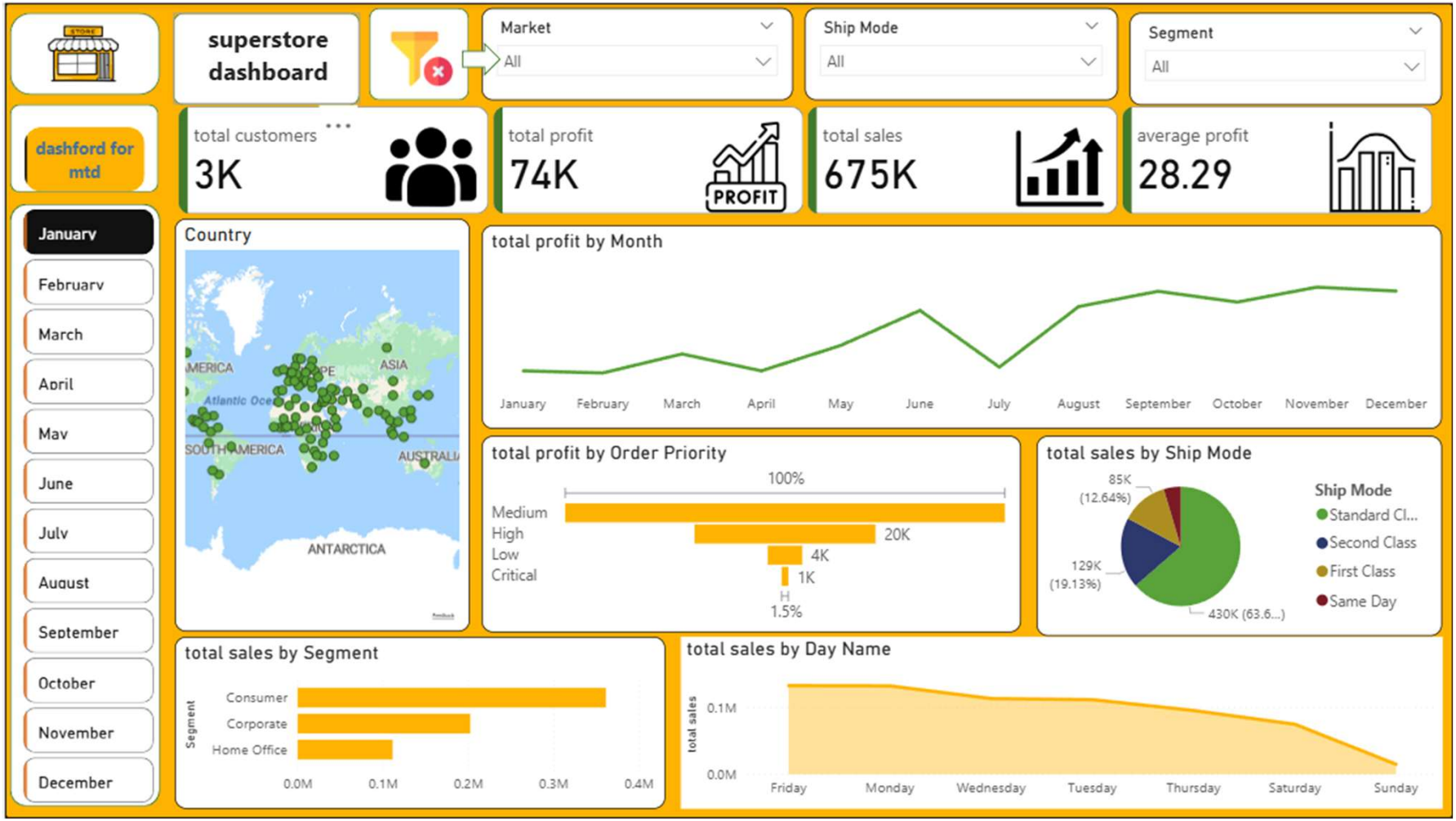

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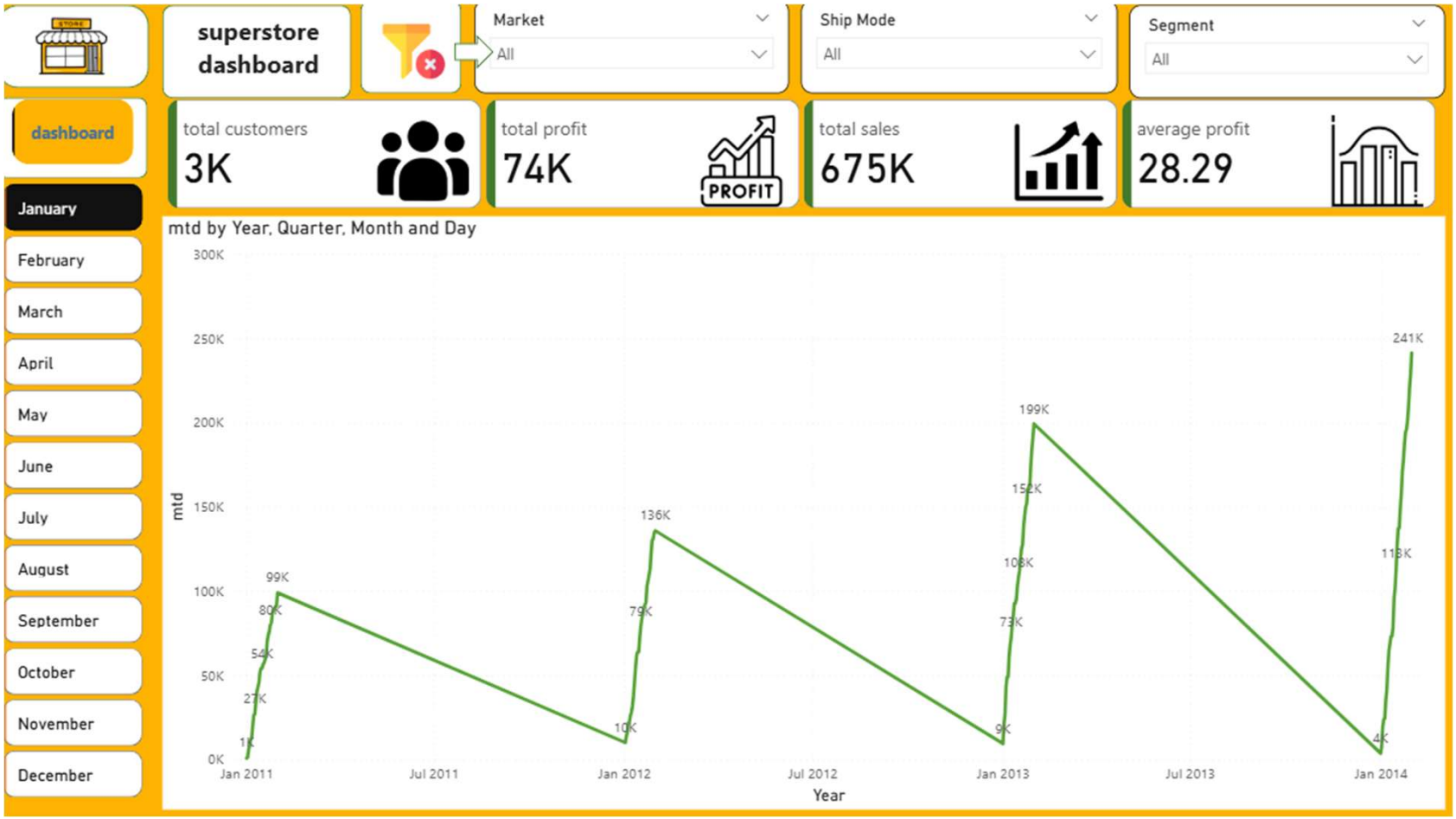

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