

# Sample Superstore Data Analysis Dashboard — Step-by-Step Documentation



## 1) Problem Statement

- Management wants a single interactive view that tracks **Sales** and **Profit** across **time**, **category**, **region**, **state**, and **customers** to quickly spot top performers and problem areas.
- The dashboard must provide drill-downs and filters for date and geography using the given dataset.

## 2) Objectives & Key Questions

**Primary Objective:** Build an interactive Excel dashboard that summarizes performance and enables ad-hoc analysis.

**KPIs & Questions the dashboard should answer: -**

- What are **Total Sales** and **Total Profit** for the selected period/filters?
- Which **product** has the **highest sales** and which has the **highest profit**?
- How do **Sales** and **Profit** trend **by Year**?
- Which **Categories/Sub-Categories** drive sales vs profit?
- Which **Region** contributes most to profit?

- Who are the **Top 5 Customers** by sales (or profit)?
  - How do results change when filtering by **Order Date** and **State**?
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### 3) Dataset & Columns

The dataset contains the following columns: -

- **Row ID** – unique transaction ID –
- **Order ID** – order identifier
- **Order Date, Ship Date** – dates for order and shipment
- **Ship Mode** – delivery type (e.g., Standard Class)
- **Customer ID, Customer Name, Segment** – customer information
- **Country, City, State, Postal Code, Region** – geography
- **Product ID, Category, Sub-Category, Product Name** – product details
- **Sales, Quantity, Discount, Profit** – transaction metrics

Derived fields / Measures:

- **Total Sales** = SUM(Sales)
  - **Total Profit** = SUM(Profit)
  - **Max Sales Product** = Product Name with highest SUM(Sales)
  - **Max Profit Product** = Product Name with highest SUM(Profit)
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### 4) Step-by-Step — Excel Build

#### Step 1: Import & Structure Data

1. Open the raw data in Excel.
2. Select the full dataset → **Insert** ► **Table** (tick *My table has headers*). Name it tbl\_Superstore.

## Step 2: Create Pivot Tables for Each Visual

Create separate PivotTables for each card/chart. Place them on a hidden *Pivots* sheet.

**A. KPI Cards (Total Sales, Total Profit)** - Pivot: **Values** = Sum of Sales, Sum of Profit. - Format as currency. Reference these values to dashboard tiles.

**B. Max Sales Product & Max Profit Product** - Pivot: **Rows**: Product Name, **Values**: Sum of Sales. Sort Descending. Take Top 1 for Max Sales Product. - Duplicate Pivot with **Values**: Sum of Profit for Max Profit Product.

**C. Sales & Profit by Category** - Pivot: **Rows**: Category (and Sub-Category if needed). **Values**: Sum of Sales, Sum of Profit. - Insert Combo Chart: Sales as Column, Profit as Line.

**D. Sales & Profit by Year** - Add Year column from Order Date. - Pivot: **Rows**: Year, **Values**: Sum of Sales, Sum of Profit. - Insert Combo Chart with Sales (Column) and Profit (Line).

**E. Profit by Region** - Pivot: **Rows**: Region, **Values**: Sum of Profit. - Insert Pie Chart → Format as Donut → add percentage labels.

**F. Top 5 Customers** - Pivot: **Rows**: Customer Name, **Values**: Sum of Sales. - Apply Value Filter → Top 5 by Sales. - Insert Bar Chart.

## Step 3: Add Filters (Interactivity)

- **Timeline**: Insert Timeline on Order Date → link to all PivotTables.
- **Slicer**: Insert Slicer for State (and optionally Segment, Ship Mode) → link to all PivotTables.

## Step 4: Layout & Formatting

- Place KPI cards on top row.
- Place charts in neat 2×2 grid.
- Place slicers and timeline on the left.
- Use consistent fonts, colors, and labels.

## Step 5: QA & Validation

- Cross-check totals with raw data.
- Verify that slicers/timelines control all visuals.
- Test single filters (e.g., one state, one year).

## Step 6: Delivery

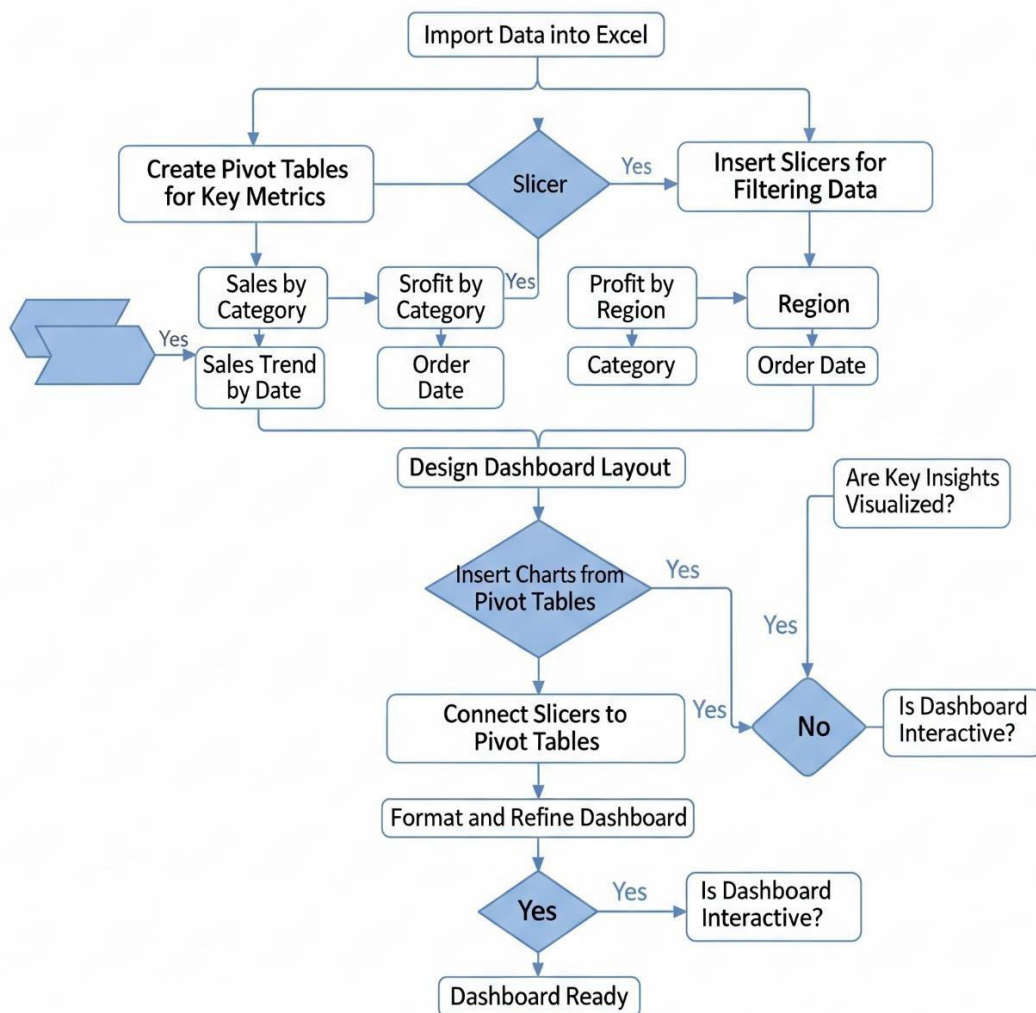
- Protect sheet layout.
  - Save as .xlsx and share with management.
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## 5) Flow Diagram of Dashboard Creation

The following diagram shows how raw data flows into cleaning, pivot tables, visuals, and then into the final dashboard:

Excel Dashboard Flow Chart:

### Sample Superstore Excel Dashboard Creation

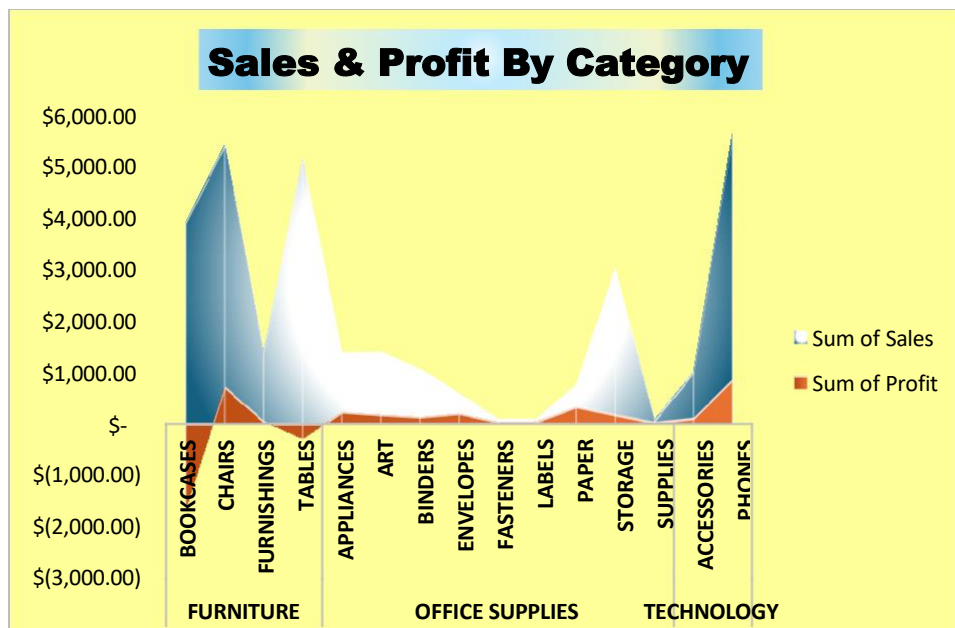


## 6) Visual-by-Visual Explanation

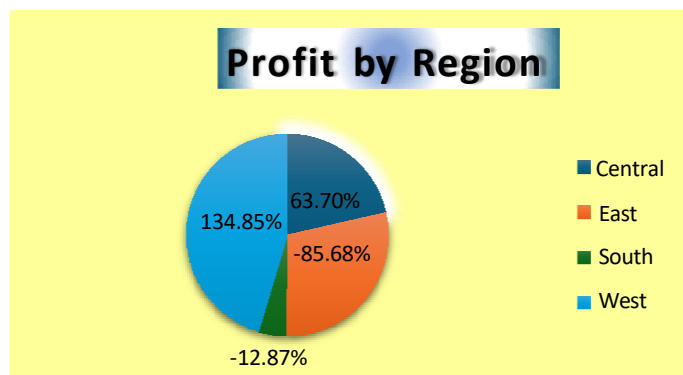
- **KPI Cards (Total Sales, Total Profit):** Quick snapshot of overall performance.

Total Sales \$30,765.20	Total Profit \$1,044.62	Max Sold Profit Riverside Palais Royal	Max Profit On Product Hon Deluxe Fabric
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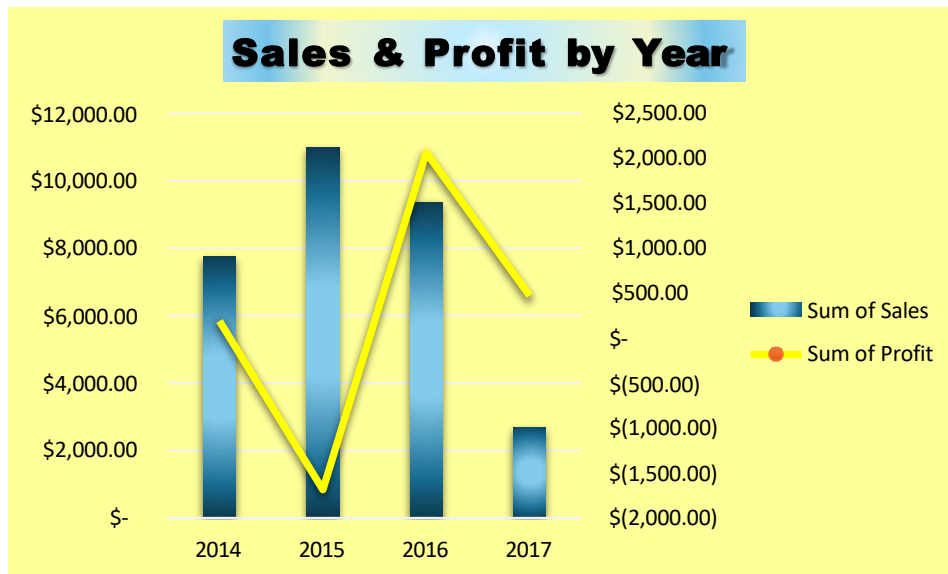
- **Max Sales Product:** Identifies best-selling product by revenue.
- **Max Profit Product:** Identifies product with highest profitability.
- **Sales & Profit by Category:** Reveals categories with strong revenue but weak margins.



- **Profit by Region:** Shows contribution of each region to profit share.



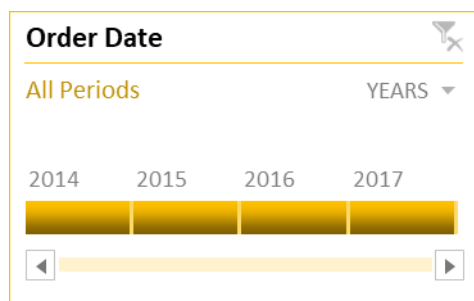
- **Sales & Profit by Year:** Highlights growth trends and profitability shifts over years.



- **Top 5 Customers:** Surfaces key customers driving majority of sales.



- **Slicers & Timeline:** Enable interactive analysis by filtering on State and Date.



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## 7) Conclusion

The Excel dashboard allows management to: -

- Monitor **total sales and profit** quickly.
- Identify **top products** and **best customers**.
- Compare **categories and regions** for performance.
- Spot **yearly sales trends** and profit gaps.
- Filter by **state** or **time period** for deeper insight.
- This ensures **data-driven decisions** for pricing, promotions, inventory, and regional strategy.

## 8) Recommendation

- Focus on **high-selling categories** like furniture.
- Revise sales strategies to **improve sales and profit**.
- Invest in the Central region to **maximize profitability**.
- Build stronger **relationships with top customers**.