

Retail Shop Dashboard

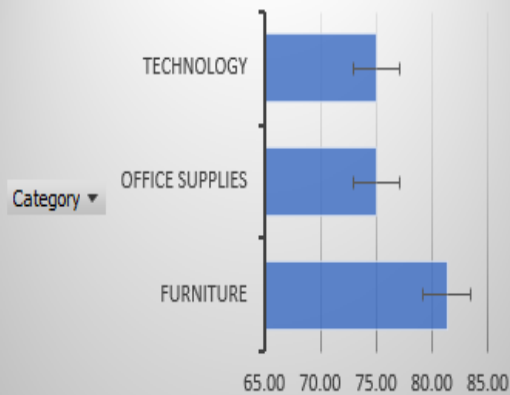


Retail Shop
Calculation

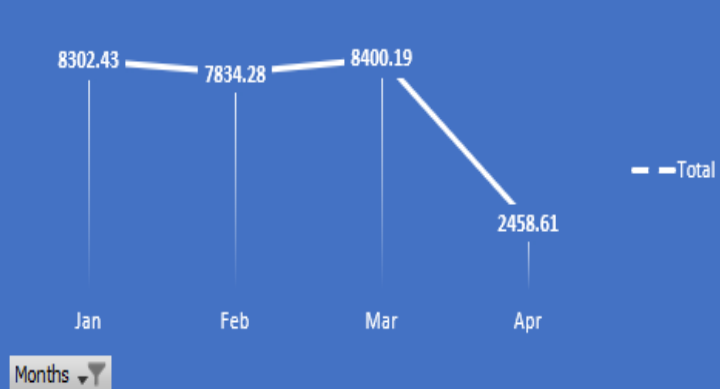
Pivot Table
Calculation

Formulas
Calculation

Average of Profit



Sum of Sales



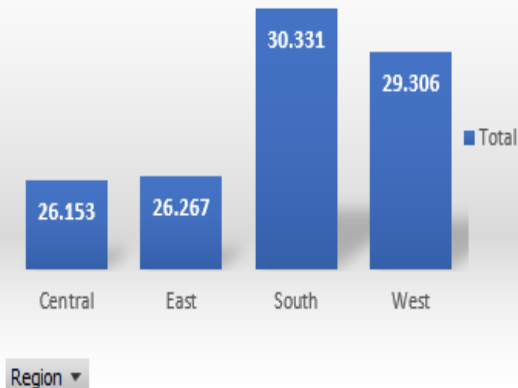
OrderDate



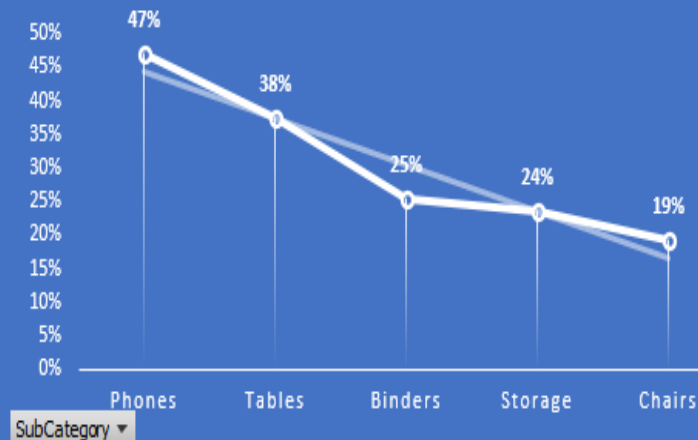
Region



Average of ShippingCost



Sum of profit margin



Category



What is Retail?

Retail is the process of selling products or services directly to customers for personal use.

Example: A clothing store sells shirts directly to customers (not businesses).

Basic Retail Calculations	Purpose
$\text{Sales Revenue} = \text{Price} \times \text{Qty}$	Total money earned from sales
$\text{Profit} = \text{Sales} - \text{COGS}$	Measure of earnings
$\text{Gross Margin \%} = (\text{Profit} \div \text{Sales}) \times 100$	Profitability ratio
$\text{Inventory Turnover} = \text{COGS} \div \text{Avg. Inventory}$	Stock efficiency
$\text{Discount} = \text{Price} - (\text{Price} \times \text{Discount\%})$	Final selling price


Tools for Retail Analysis:


- Excel — Sales reports, stock management
- SQL — Data queries, inventory database

Retail Sales Analysis Project Highlights

 Total Revenue Analyzed: \$26995.51M +

 Highest Product 81.35% (Furniture)

 Top 5 Customers: 20.31% of Total Sales

 Return Rate: 52% of Total Orders

 Monthly Sales Trends: Line Chart Visualized

 Avg. Shipping Cost per Region: \$28.95

 Top Sub-Category: Phones (47% Profit Margin)

Pivot-Table Analysis

Dashboard

Total sum of sales

Sum of Sales

26995.51

Return Rate

52%

% of order returned

Row Labels Count of OrderID

No 48.00%

Yes 52.00%

Grand Total 100.00%

Average profit based on Category

Row Labels Average of Profit

Furniture 81.35

Office Supplies 75.00

Technology 75.05

Grand Total 77.69

Top 5 customers based on sales

Row Labels Sum of Sales

Customer_11 492.94

Customer_56 490.62

Customer_89 487.09

Customer_45 484.63

Customer_0 471.46

Grand Total 2426.74

Sales Trend Analysis

Row Labels Sum of Sales

Jan 8302.43

Feb 7834.28

Mar 8400.19

Apr 2458.61

Grand Total 26995.51

Shipping Cost Analysis

Row Labels Average of ShippingCost

Central 26.153

East 26.267

South 30.331

West 29.306

Grand Total 28.195

Profit margin analysis

Row Labels Sum of profit margin

Phones 47%

Tables 38%

Binders 25%

Storage 24%

Chairs 19%

Grand Total 29%

Difference between sales and profit

Row Labels Sum of Sales Sum of Profit

Binders 4103.44 1041.95

Chairs 5677.34 1098.52

Phones 3214.72 1510.94

Storage 8159.25 1924.5

Tables 5840.76 2192.62

Using Formulas

(SUM, AVERAGEIFS, IF, VLOOKUP)

Which product category gives the highest average profit?

Category	average profit
Furniture	81.35285714
Technology	75.05
Office Supplies	75.00423077

Who are the top 5 customers by total sales?

Customer Name	Total Sales
Customer_11	492.94
Customer_56	490.62
Customer_89	487.09
Customer_45	484.63
Customer_0	471.46

Returned 32

Percentage of order 52%

What is the average shipping cost per region?

Region	average ship cost
East	26.267
Central	26.153
West	29.306
South	30.331

Which Sub-Category has the highest profit margin?

Sub-Category	total profit each	total sales ea	Profit marg
Storage	1925	8159.25	24%
Phones	1511	3214.72	47%
Chairs	1099	5677.34	19%
Binders	1042	4103.44	25%
Tables	2193	5840.76	38%

Try Using SQL

```
1
2      -- 📌 Sales & Revenue Analysis
3      -- 1.What is the total revenue generated from all orders?
4
5          SELECT
6              ROUND(SUM(sales), 2) AS total_revenue
7      FROM
8          retail_shop;
9
10     -- 2.Which product category has the highest total profit?
11
12         SELECT
13             Category, ROUND(SUM(Profit), 2) AS total_profit_category
14     FROM
15         retail_shop
16     GROUP BY Category
17     ORDER BY Category;
18
19     -- 3.List the top 5 customers by total sales.
20     SELECT
21         CustomerName, SUM(Sales) AS top5
22     FROM
23         retail_shop
24     GROUP BY CustomerName
25     ORDER BY top5 DESC
26     LIMIT 5;
27
28     -- 4.Calculate the average discount given across all orders.
29     SELECT
30         OrderID, AVG(Discount)
31     FROM
32         retail_shop
33     GROUP BY OrderID;
34
35     -- 5.Which region generated the highest sales amount?
36
37         SELECT
38             Region, ROUND(SUM(Sales), 3) AS highest_sales_reg
39     FROM
40         retail_shop
41     GROUP BY Region
42     ORDER BY highest_sales_reg DESC
43     LIMIT 1;
44
```

Key Insights, Recommendations & Tools

- **Return Rate:** 52%
- **Average Shipping Cost per Region:** \$28.95
(Opportunity to optimize return policies and shipping costs)
- **Product Profitability:**
- **Top Sub-Category by Profit Margin:** Phones (47%)
(Focus on promoting phone products for higher profitability)
- **Key Insights & Recommendations:**
 - Reduce return rates by evaluating product descriptions or revising return policies.
 - Expand promotions for high-margin products like phones.
 - Nurture relationships with top customers for sustained growth.