

# Business Analytics with Excel Certification Training

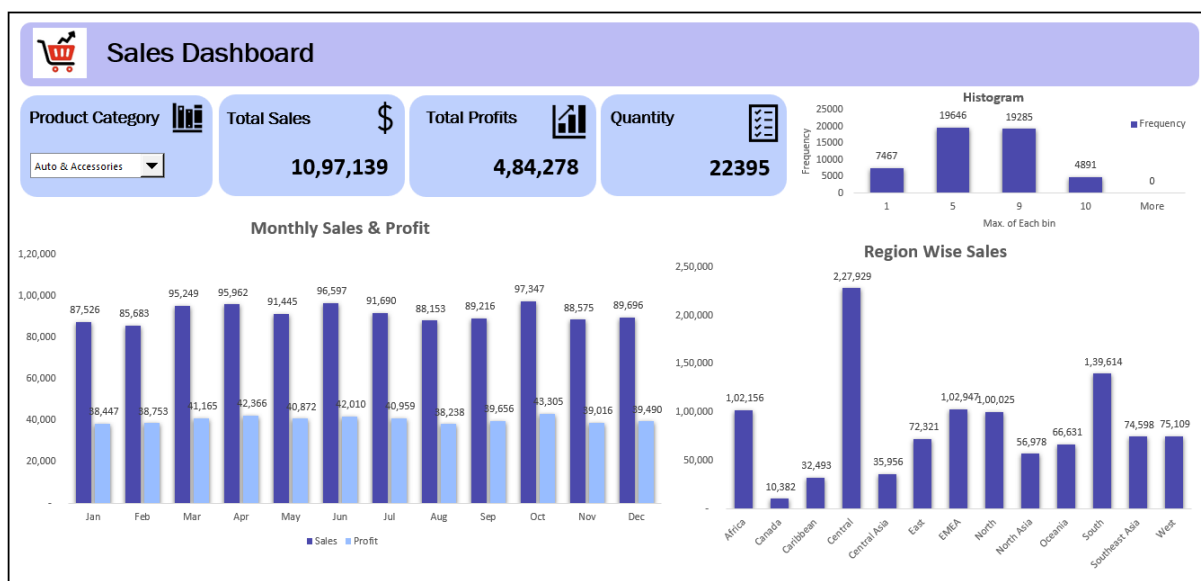
## Designing a Sales Dashboard in Excel

### Excel Workbook Link:

[https://drive.google.com/drive/folders/1xXdQk\\_-zJYQrbMgT2JYebbXtwYpljnwQ](https://drive.google.com/drive/folders/1xXdQk_-zJYQrbMgT2JYebbXtwYpljnwQ)

### Steps to be followed:

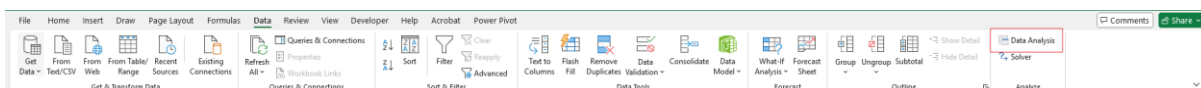
1. Open the dataset input file E-Commerce Dashboard dataset.xlsx
2. Prepare a table of sales and profit month-wise in the working sheet
3. Prepare the sales table region-wise in the working sheet
4. Create user control combo box for product category
5. Create a column chart of the month-wise table and region-wise table
6. Link the table with a combo box
7. Create a dashboard



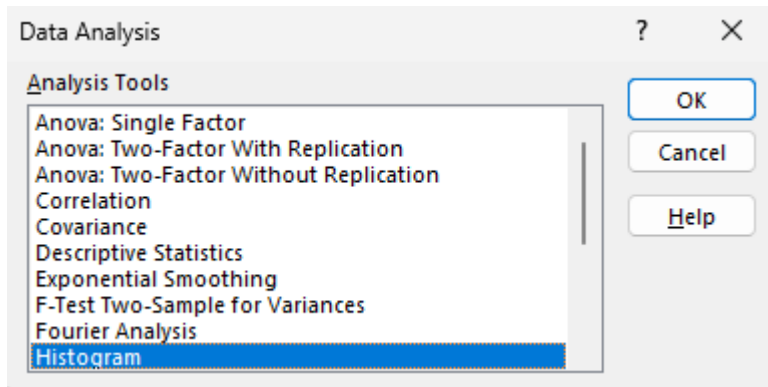
### Steps to create a dashboard in Excel

#### Step 1: Create histogram for shipping days (Aging)

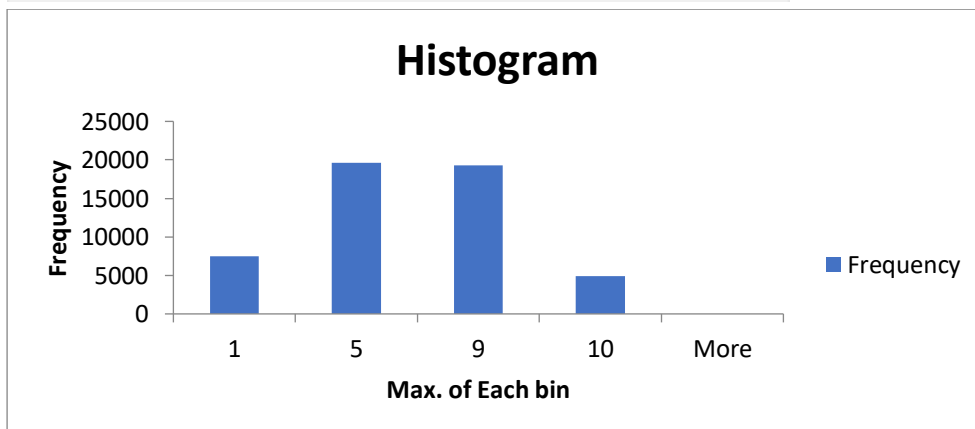
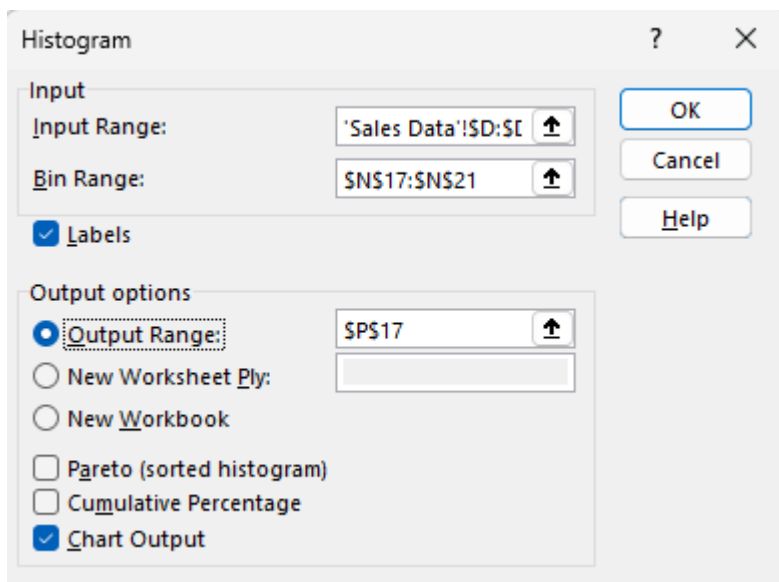
- To create a histogram, click the **Data** tab, and then click on **Data Analysis** under Analyze Group.



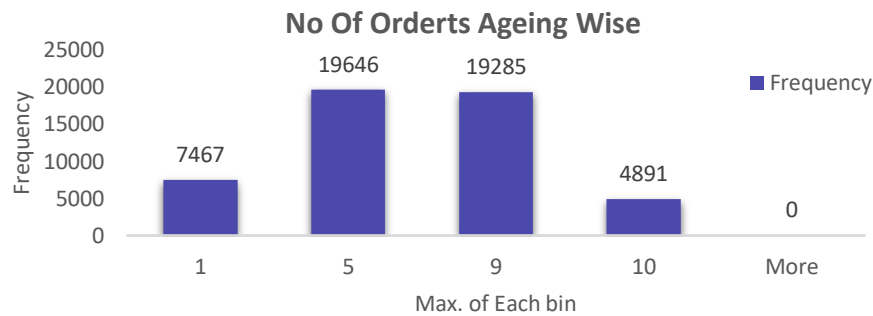
- Now, select **Histogram** and click **OK**. A histogram dialog box will appear.



- In the histogram dialog box, click the **Labels** check box.
- After that, select the range ("Sales Data!\$D:\$D") in the Input Range box and ("N\$17:\$N\$21") in the Bin Range box
- In the **Output Range** section, select range "\$P\$17" for the binning table, click the **Chart Output** check box, and then **OK**.

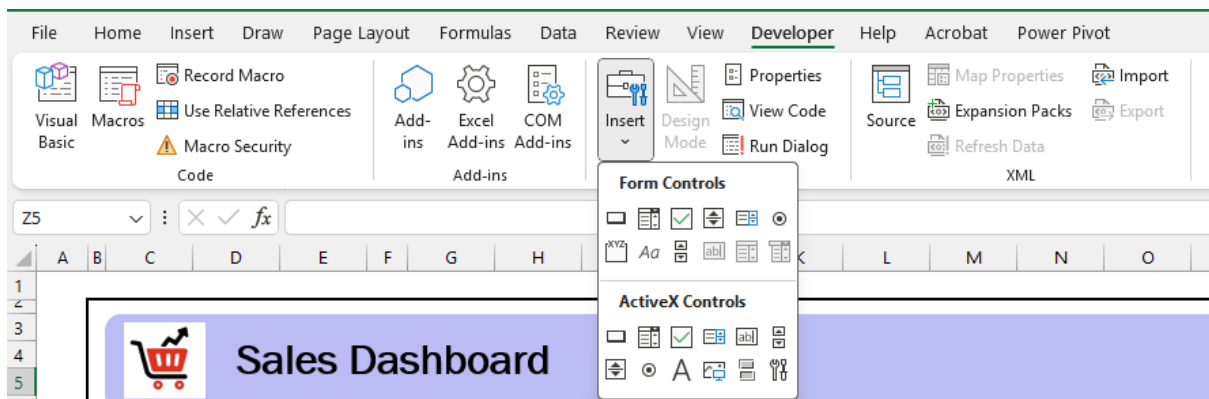


- Visualization can be changed under Format Axis.

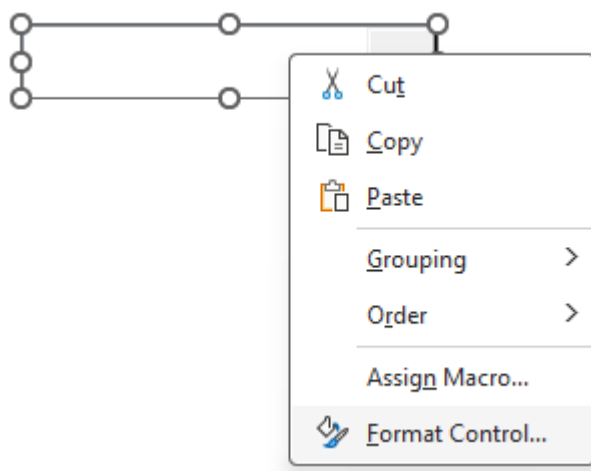


## Step 2: Create a combo box:

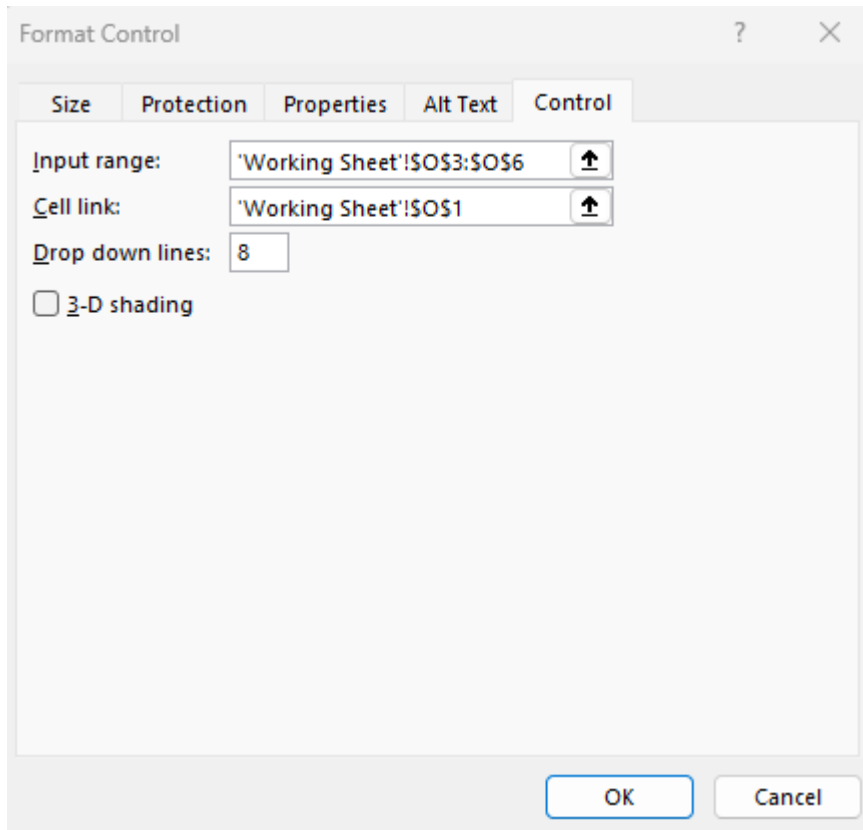
- Insert combo box for product category list in the dashboard sheet.
- Click on the **Developer** tab and click on **Insert**, then select **Combo box** and draw a box anywhere on the dashboard sheet.



- Pass the input range and cell link for the combo box.
- Right-click the country list combo box, and Click on **Format Control**.



- Pass Input range “**Working!\$Q\$3:\$Q\$6**” and Cell link “**Working Sheet!\$O\$1**” from the working sheet



Format Control

Size Protection Properties Alt Text Control

Input range: 'Working Sheet!\$O\$3:\$O\$6' [Up Arrow]

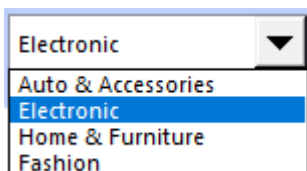
Cell link: 'Working Sheet!\$O\$1' [Up Arrow]

Drop down lines: 8

☐ 3-D shading

OK Cancel

- The following options are displayed when the combo box is selected.



Electronic ▼

Auto & Accessories


Electronic

Home & Furniture

Fashion

Now, write the offset function in cell “**C3**” to fetch the product category based on the selection in the product category Combo box.

- Write the equal sign and then the function name
- Pass the first argument as Cell “O2”
- In the second argument, select the cell “O1”.
- In the third argument, type zero and close the parenthesis.



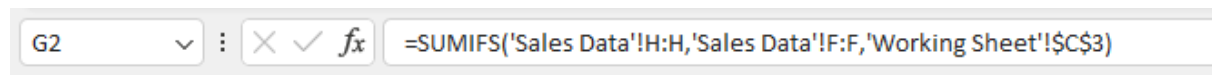
C3 : [X] [✓] [fx] =OFFSET(O2,O1,0)

**Step 3: Write SUMIFS formula to calculate the total sales, quantity, and profit**

Now, write the SUMIFS formula to calculate sales, quantity, and profit in the dashboard sheet.

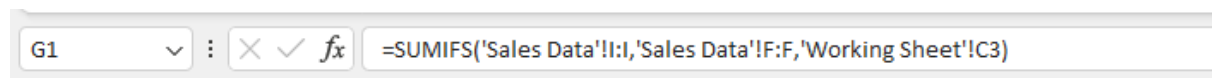
Enter the formula in cell **G2**:

- Enter the equal sign, and then enter the function name and open parenthesis
- Pass the first argument Sum Range. Select range “**Sales Data'!H:H**”, and then enter a comma
- Now, pass the second argument Product Category column “criteria Range1” as “**Sales Data'!F:F**”, and then enter a comma
- Pass the third argument “criteria1” as “**Working Sheet'!\$C\$3**”.



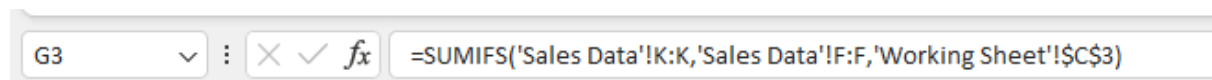
**Perform the same function to calculate the quantity in cell G7**

- In **G1**, write the equal sign, and then enter the function name and open parenthesis
- The first argument is Sum\_Range. Select range “**Sales Data'!I:I**”, and then enter a comma
- Pass the second argument Product Category column “criteria Range1” as “**Sales Data'!F:F**”, and then enter a comma
- Pass the third argument “criteria1” as “**Working Sheet'!C3**”.



**For-Profit**

- In **G3**, write the equal sign and then enter the function name and open parenthesis
- The first argument is Sum\_Range. Select range “**Sales Data'!K:K**”, and then enter a comma
- Pass the second argument Product Category column “criteria Range1” as “**Sales Data'!F:F**”, and then enter a comma
- Now, pass the third argument “criteria1” as “**Working Sheet'!\$C\$3**”.



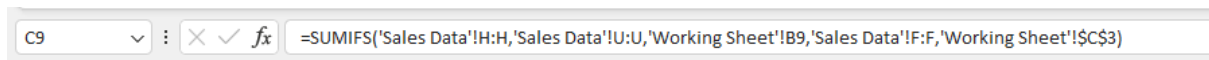
**Step 4: SUMIFS formula to calculate sales and profit month-wise**

Now write the SUMIFS formula to calculate the sales and profit month-wise and sales region-wise.

Enter the formula in cell **C9**:

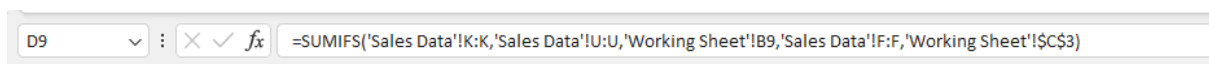
- Enter the equal sign, and then enter the function name and open parenthesis
- The first argument is Sum\_Range. Select range “**Sales Data'!H:H**”, and then enter a comma

- Pass the second argument month column “criteria Range1” as “**Sales Data'!U:U**”, and then enter a comma.
- Now, pass the third argument “criteria1” as “**Working Sheet'!B9**,” and then enter a comma
- Pass the fourth argument as “**Sales Data'!F:F**” product category column, and then enter a comma.
- Pass the fifth argument as “**Working Sheet'!\$C\$3**”
- Now, copy and paste the formula in Range **C9:C20**.



Enter the formula in cell **D9**:

- Enter equal sign, then enter function name and open parenthesis
- The first argument is Sum\_Range. Select range “**Sales Data'!K:K**”, and then enter a comma
- Now, pass the second argument month column “criteria Range1” as “**Sales Data'!U:U**”, and then enter a comma
- Pass the third argument “criteria1” as “**Working Sheet'!B9**” and then enter a comma
- Pass the fourth argument as “**Sales Data'!F:F**” product category column, and then enter a comma
- Enter the fifth argument as “**Working Sheet'!\$C\$3**”
- Now, copy and paste the formula in Range **D9:D20**.



Month	Sales	Profit
Jan	31,280	14,090
Feb	29,776	12,679
Mar	32,800	14,173
Apr	33,417	14,603
May	33,705	15,610
Jun	30,219	12,858
Jul	29,644	13,384
Aug	34,088	14,562
Sep	33,069	14,518
Oct	39,240	17,419
Nov	32,598	15,121
Dec	34,902	15,157

#### Step 5: SUMIFS formula to calculate sales region wise

- Write the equal sign, and then enter the function name and open parenthesis
- The first argument is Sum\_Range. Select range “**Sales Data'!H:H**”, and then enter a comma
- Pass the second argument region column “criteria Range1” as “**Sales Data'!T:T**”, and then enter a comma

- Now, pass the third argument “criteria1” as “**Working Sheet'!H9**” and then enter a comma
- Pass, the fourth argument as “**Sales Data'!F:F**” product category column, and then enter a comma
- Pass the fifth argument as “**Working Sheet'!\$C\$3**”
- Now, copy and paste the formula in Range **I9:I21**.

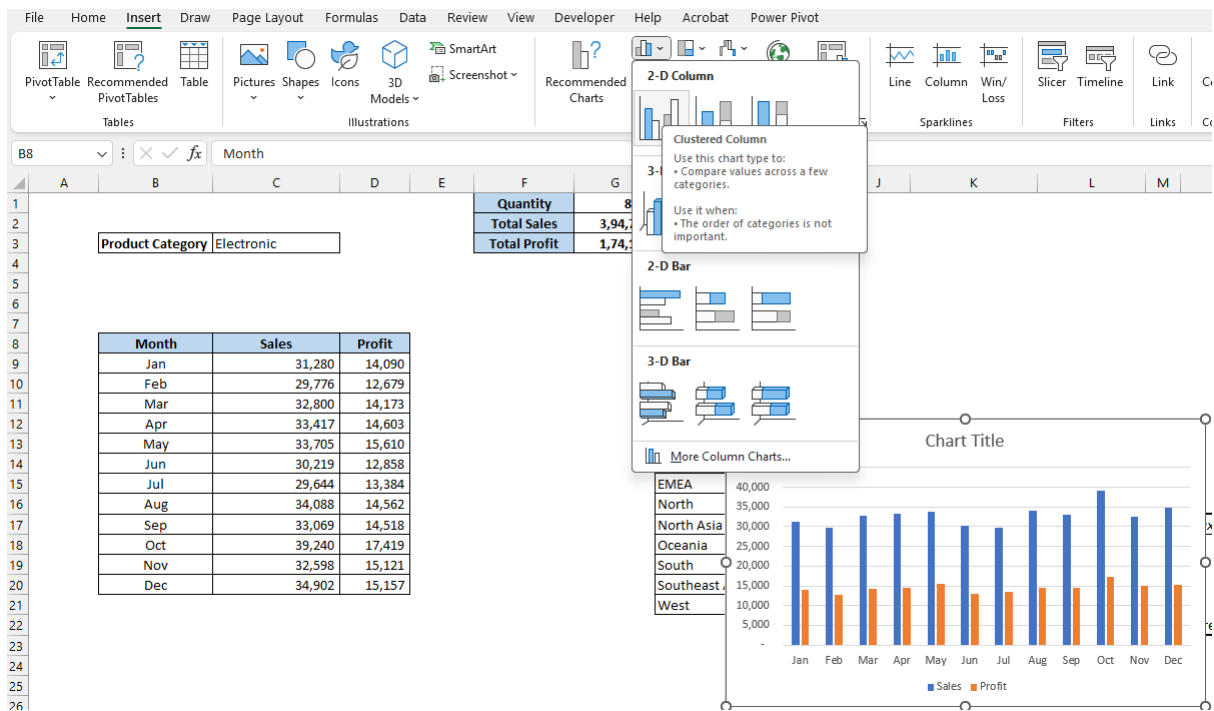
I9 : ✕ ✓ *fx* =SUMIFS('Sales Data'!H:H,'Sales Data'!T:T,'Working Sheet'!H9,'Sales Data'!F:F,'Working Sheet'!\$C\$3)

Region	Sales
Africa	37,993
Canada	4,602
Caribbean	12,287
Central	82,750
Central Asia	11,573
East	23,353
EMEA	42,527
North	36,746
North Asia	16,230
Oceania	30,575
South	47,491
Southeast Asia	21,604
West	27,007

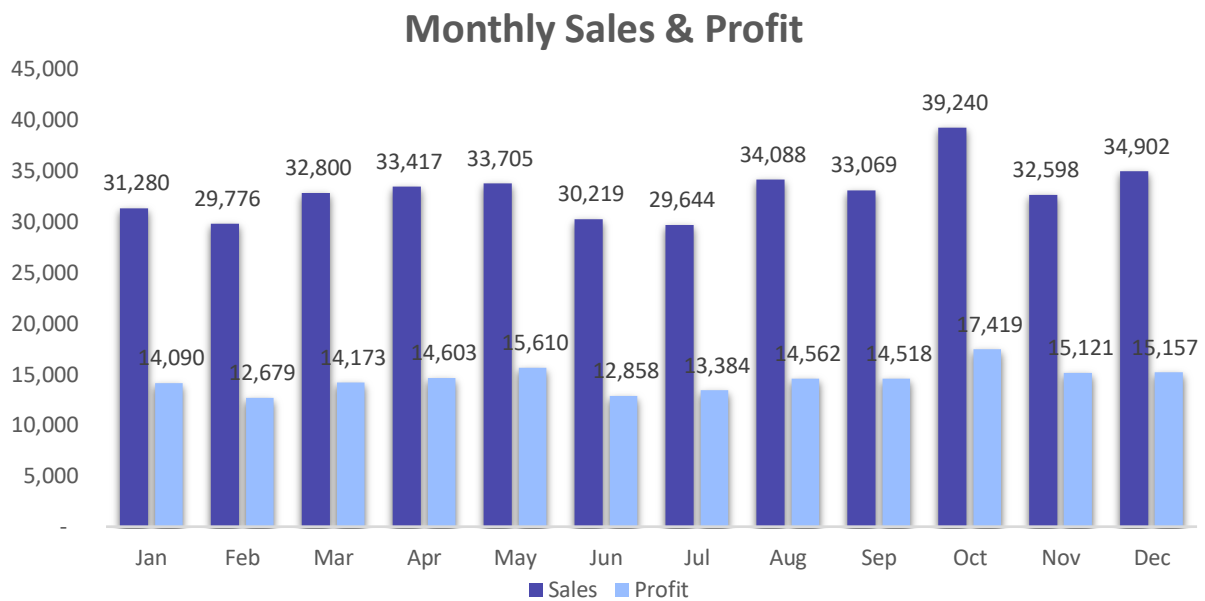
### Step 6: Create column chart

Now, create the column chart for both region-wise and month-wise tables

- Select table (**B8:D20**), and click the insert tab, then select Insert column chart under the Charts Panel

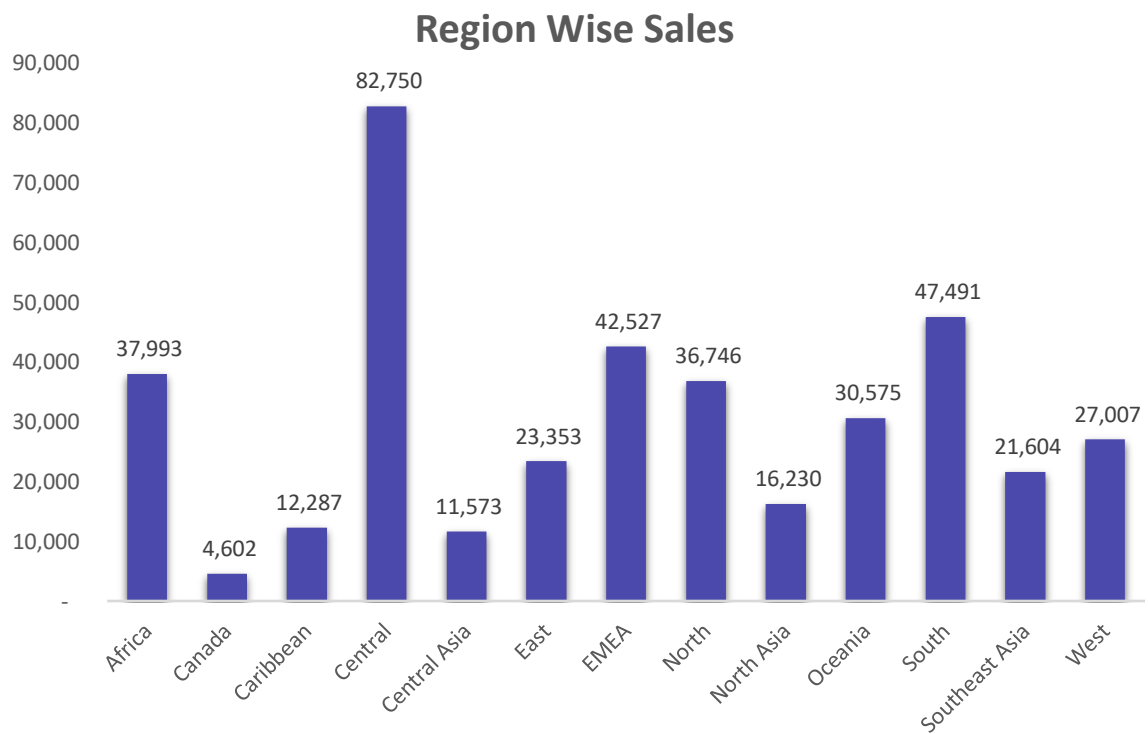
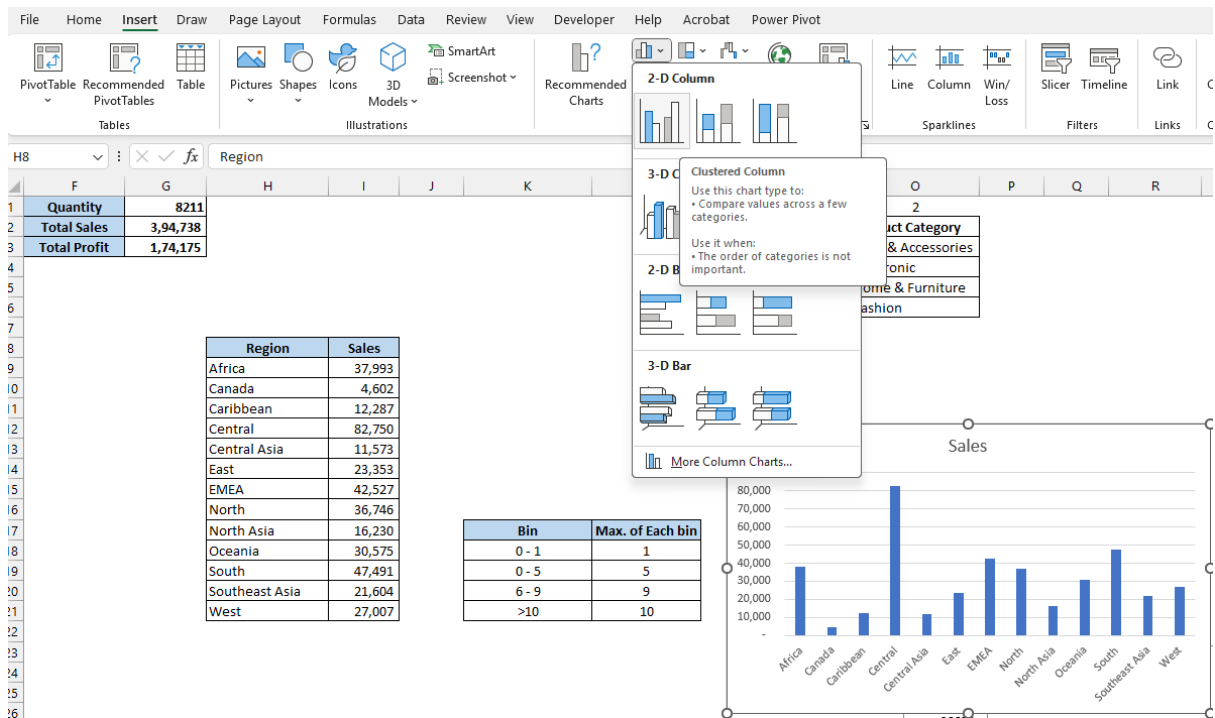


- Cut and paste the chart in the dashboard sheet

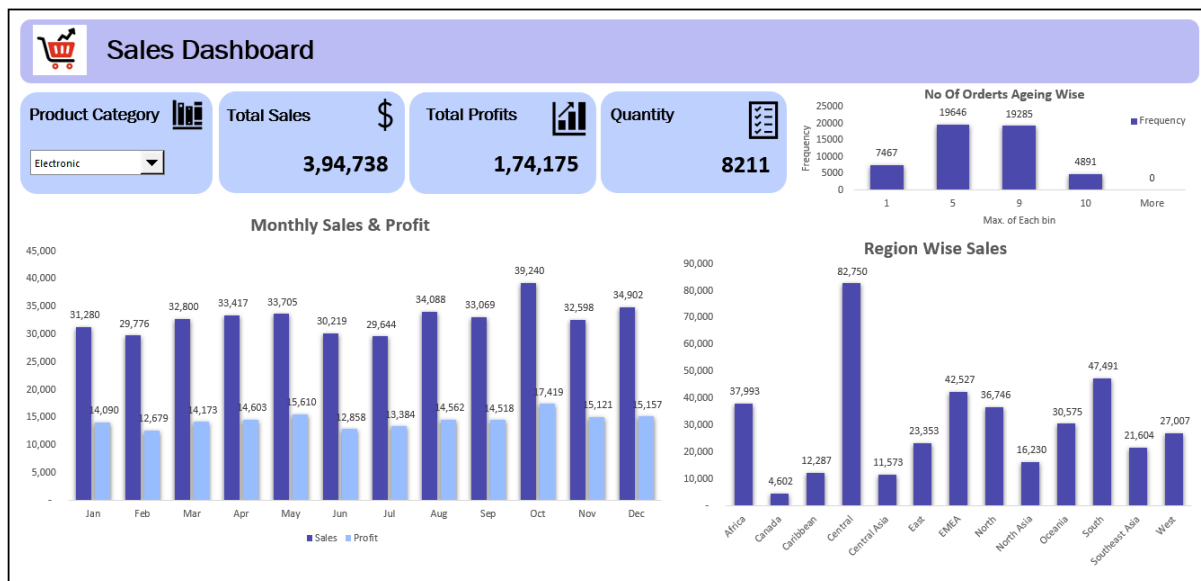


- Perform the same steps for other tables to create more charts for the dashboard





This is the sales dashboard. We can apply any colour to the interior of the cells and the data series to format the data.



**Note:** Customized the dashboard with the inbuilt icons and custom colours.