Business Analytics with Excel

E-Commerce Sales Dashboard

DESCRIPTION -:

Background

E-commerce is fast gaining ground as an accepted and used business paradigm. More and more business houses are implementing web sites providing functionality for performing commercial transactions over the web. It is reasonable to say that the process of shopping on the web is becoming commonplace.

Objective -:

An Online E-Commerce Company wants to design a Sales dashboard to analyze the sales based on various product categories. The company wants to add user control for product category, so users can select a category and can see the trend month-wise and product-wise accordingly.

Dataset Description -:

We will be using E-Commerce Dashboard.xlsx Dataset.

The dataset in file **E-Commerce Dashboard dataset.xlsx** contains sales data for different product categories. The following are the features in the dataset:

Order ID	Unique Order ID of a product
Order Date	Order Placement Date
Ship Date	Shipment Date of the placed order
Aging	Used to Create Histogram Bin
Ship Mode	Shipment mode of placed order
Product Category	Product Category
Product	Name of the Product
Sales	Sales Amount

Quantity	The amount or number of a material
Discount	A deduction from the usual cost of something
Profit	A financial advantage or benefit
Shipping Cost	The amount required to ship the placed order
Order Priority	Precedence of placed order
Customer ID	Unique Customer ID
Customer Name	Name of the Customer
City	Unique City Name
State	Unique State Name
Country	Unique Country Name
Region	Especially the part of a country
Months	The month of placing the order

The following project tasks are required to be performed in Excel:

1. Use the saved Sample E-Commerce database
2. Prepare a table of Sales and Profit month-wise in a 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

1. Prepare a table of Sales and Profit month-wise in a working sheet.

Months	Sales	Profit
Jan	87,526	$38,447
Feb	85,683	$38,753
Mar	95,249	$41,165
Apr	95,962	$42,366
May	91,445	$40,872
Jun	96,597	$42,010
Jul	91,690	$40,959
Aug	88,153	$38,238
Sep	89,216	$39,656
Oct	97,347	$43,305
Nov	88,575	$39,016
Dec	89,696	$39,490

By creating the pivot table First I select the month field and drag into the Rows field list there by selecting the Sales and profit in Values Field.

Table has created for the Sales and Profit month-wise in a working sheet.

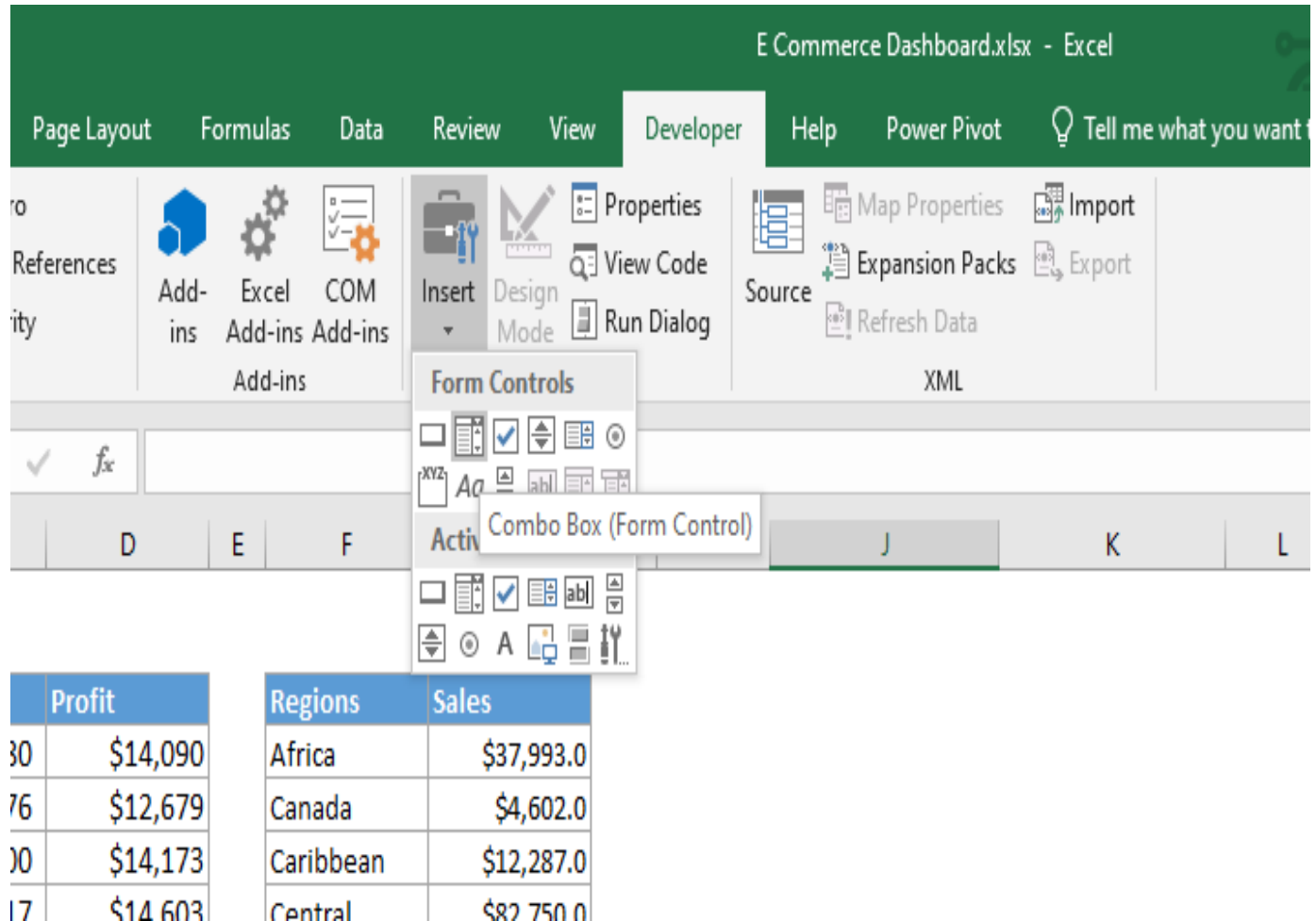# 2. Prepare the sales table region-wise in the working sheet

Regions	Sales
Africa	$1,02,156.0
Canada	$10,382.0
Caribbean	$32,493.0
Central	$2,27,929.0
Central Asia	$35,956.0
East	$72,321.0
EMEA	$1,02,947.0
North	$1,00,025.0
North Asia	$56,978.0
Oceania	$66,631.0
South	$1,39,614.0
Southeast Asia	$74,598.0
West	$75,109.0
	$10,97,139.0

By creating the pivot table First I select the Region field and drag into the Rows field list there by selecting the Sales in Values Field .
Table has created for the sales table region-wise in the working sheet.

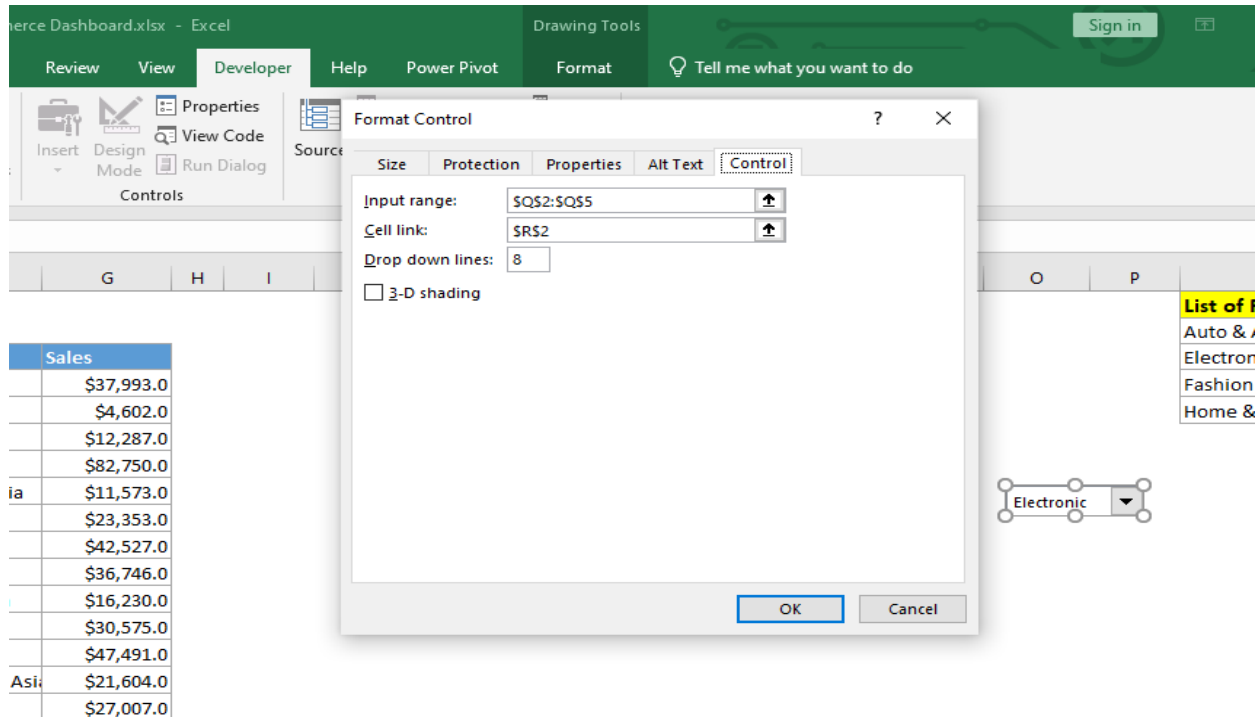# 3. Create User Control Combo box for Product Category

1) Go to developer tab select insert option. In to the insert option select the Combo box (From Control) and drag into working sheet.
2) Next Right click on the combo box and select the Format control option.

Review   View   Developer   Help   Power Pivot   Format   ♀ Tell me what you want to do

Properties
View Code
Insert   Design   Run Dialog   Source
Mode

Controls

Format Control   ?   ✕

Size   Protection   Properties   Alt Text   Control

Input range: $Q$2:$Q$5   ⬆

Cell link: $R$2   ⬆

Drop down lines: 8

☐ 3-D shading

OK   Cancel

G	H	I	O	P
				List of
				Auto &
				Electron
Sales				Fashion
$37,993.0				Home &
$4,602.0				
$12,287.0				
$82,750.0				
ia $11,573.0				
$23,353.0				
$42,527.0				
$36,746.0				
$16,230.0				
$30,575.0				
$47,491.0				
Asi $21,604.0				
$27,007.0				

Electronic ▼

3) Select the input range and the output range as follow.

4) By selecting the list of product we create the user control combo box

5) To make the user control combo box dynamic i.e we need to link with the sales column, profit column and the Region column.

6) To do that we need to write the =OFFSET(Q1,$R$2,0) and combine it with the =SUMIFS('Sales Data'!H:H,'Sales Data'!T:T,F4:F16,'Sales Data'!F:F,$R$3) Function.

7) Offset function gives the required product and to get the required sum for the specific product we need to decide the criteria To do that I use Sumifs Function.

8) This gives the Dynamic user control of the sales data.

4. Create a Column Chart of the month-wise table and region-wise table

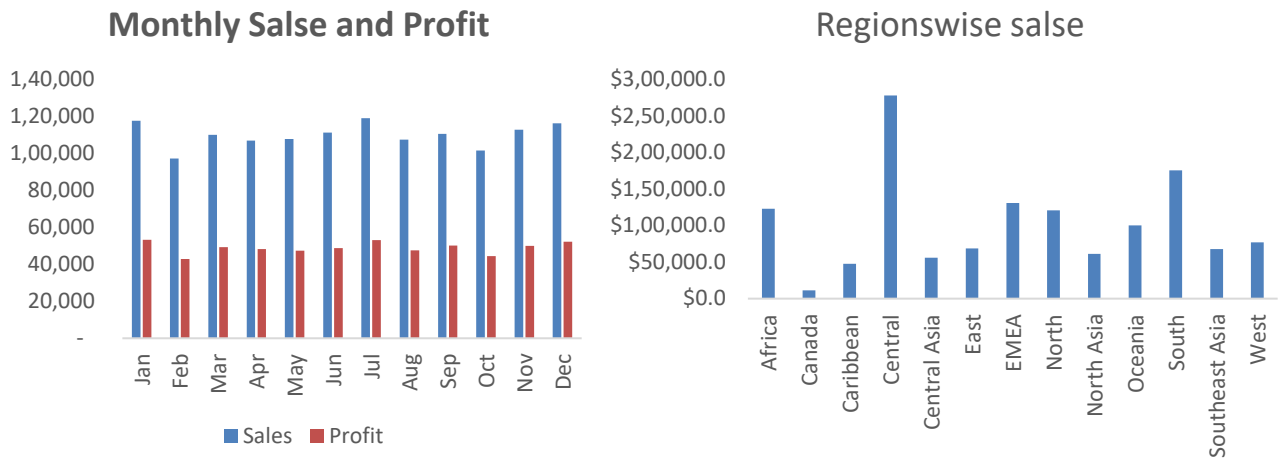4.1) To Create a Column chart I select cell number B3 to cell number D13
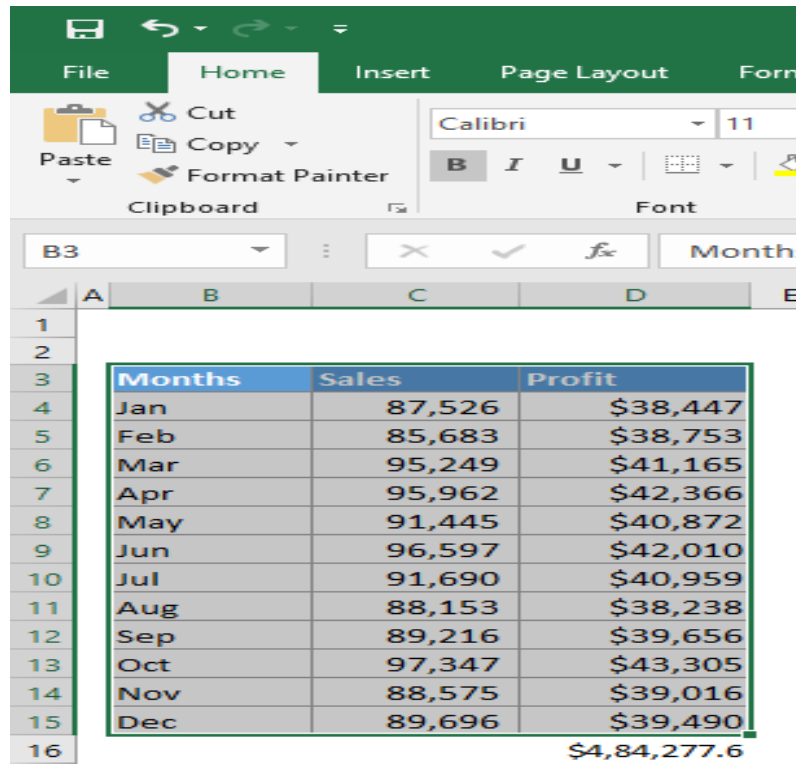
4.2) select insert tab in the excel sheet and from insert tab select 2d cluster column Chart .
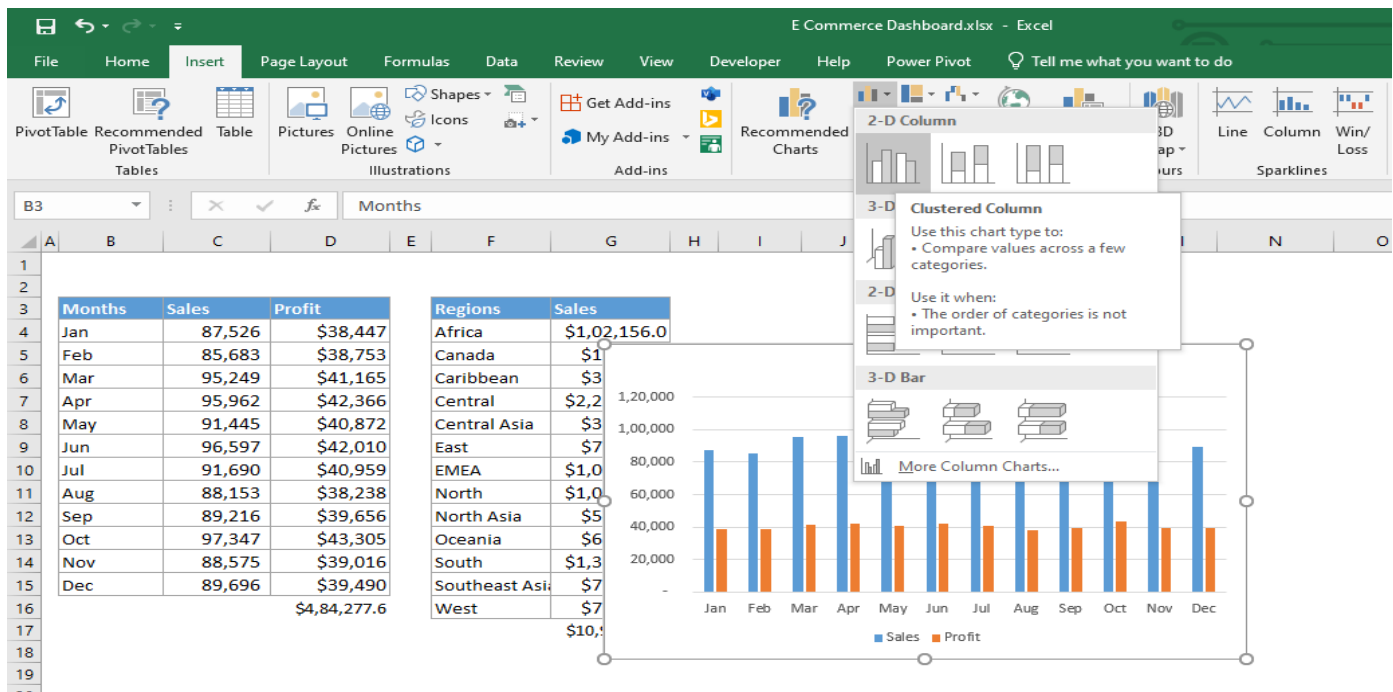
4.3) create chart using the 2d cluster column Chart and give the name monthly sales and profit

4.4) same with the regionwide table and create the chart.

5. Link the table with a combo box and Create a dashboard

5.1) To Create the dashboard first select new sheet form the bottom left corner and give the sheet with new name Dashboard.

5.2) To link the Dashboard with the from control combo box Right click on combo box and select the format control option and give the link of working sheet.
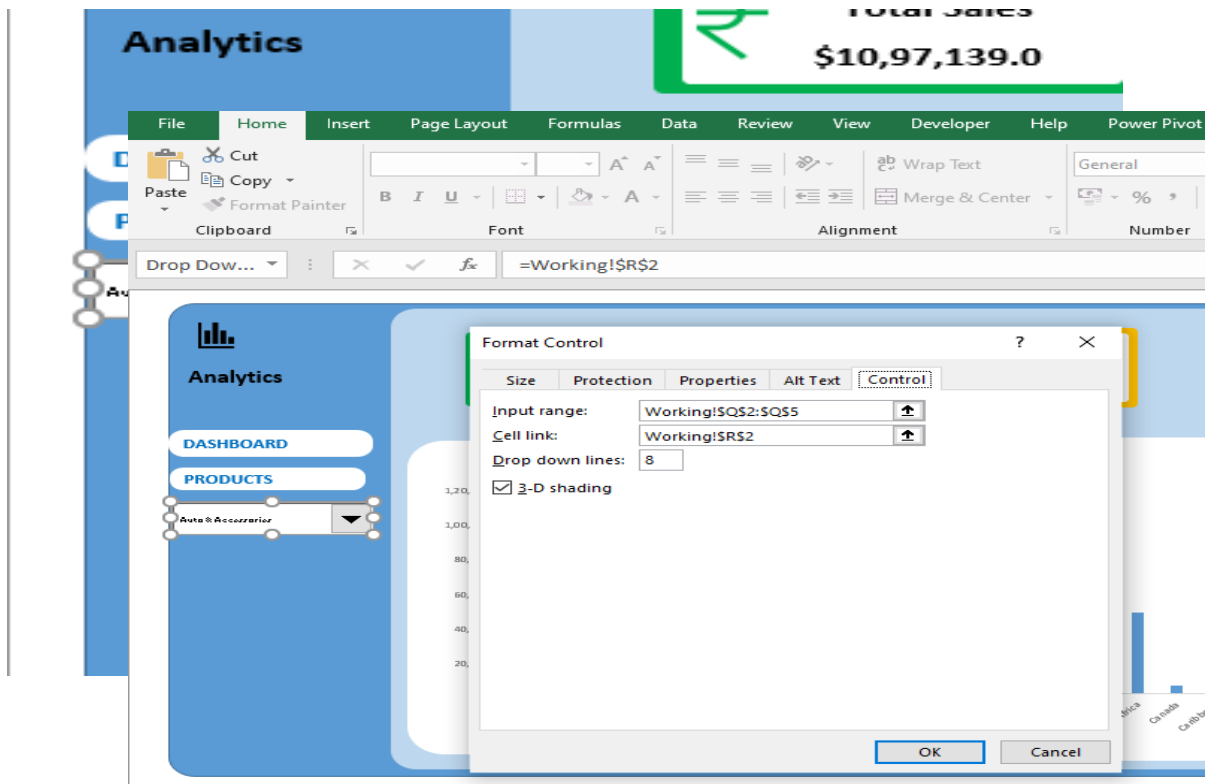
5.3) create the dashboard by linking the chart with the all cluster chart and insert box.

   5.3.1) Dashboard For product Category <mark>Auto & Accessories.</mark>

<mark>Interpretation -:</mark> From the dashboard of Auto & Accessories we can confirm that Central region has highest number of sales and July month has highest number of profit and sales.

dashboard analysis of Auto & Accessories	Month and region with Highest Number of sales and Profit	Highest Number of sales and Profit
1) Sales	July	$1,19,095
2) Profit	July	$53,274
3) Region sales	Central	$2,78,301.0

5.3.2) Dashboard For product Category Electronics.

Interpretation -: From the dashboard of Electronics. We can confirm that Central region has highest number of sales and October month has highest number of profit and sales.

Dashboard analysis of Product Electronics	Month and region with Highest Number of sales and Profit	Highest Number of sales and Profit
1) Sales	October	$39,240
2) Profit	October	$17,419
3) Region sales	Central	$82,750.0

5.3.3) Dashboard For product Category <mark>Fashion.</mark>

<mark>Interpretation -:</mark> From the dashboard of <mark>Fashion</mark>. We can confirm that <mark>Central</mark> region has highest number of sales and <mark>December</mark> month has highest number of profit and sales.

Dashboard analysis of Product Fashion	Month and region with Highest Number of sales and Profit	Highest Number of sales and Profit
1) Sales	December	$4,52,066
2) Profit	December	$2,16,460
3) Region sales	Central	$82,750

5.3.4) Dashboard For product Category <mark>Home & Furniture.</mark>

Interpretation -: From the dashboard of <mark>Home & Furniture</mark>. We can confirm that <mark>Central</mark> region has highest number of sales and <mark>January</mark> month has highest number of profit and <mark>July</mark> month has highest number of sales.

Dashboard analysis of Product Home & Furniture	Month and region with Highest Number of sales and Profit	Highest Number of sales and Profit
1) Sales	July	$1,19,095
2) Profit	January	$53,274
3) Region sales	Central	$2,78,301