

## Chapter 13: Working with Charts



### Objective

After completing this chapter, you will be able to know;

- How to Create Charts
- The different type of charts
- How to Format charts

### Creating Charts using Chart Tools

Charts may be used to present data more effectively. For example, it takes time to analyze trends in data, but if it is graphically represented, it becomes easy for us. There are many types of charts like Column, Line, Pie, Bar, Area, scatter etc. To create a chart, follow the steps below.

- 1) Select the data
- 2) Go to "Insert" tab
- 3) From the "Charts" group, select the chart that you want to create.

We can select any type of Column charts or click on All Chart Types.....

"Insert Chart" dialog box will appear. Select the desired chart and click Ok. The chart will be created on the same worksheet and excel will also recommend some charts in that dialog box.

## Chart Designs

Excel provides different chart designs with every chart type which we can select from Design Tab.

### Including Titles and Values in Charts using Chart Tools

There are a few inbuilt layouts that Excel provides, these can be selected from the Design tab in Chart Tools. However, we would need to create some custom layouts where the chart title, Axis Title, legend, Data Label and Data Table positions are different from the given layouts. In this

case, you may use the Add Chart Element option in Design Tab → Charts Layout Group → Add Chart Element

Under Add Chart Element option user will get many option like to add secondary axis, to add name to axis, to add name to charts, to add data labels etc

## Formatting charts

If you wish to change the color used to represent a series in the default design templates provided by excel, you may use the contextual tab "Format" under Chart Tools tab group. It also gives us options to change the outline color, the shape alignment and positioning of the chart.

## Charts for my Data

Depending on what you wish to represent, you may select the different types of chart to use. The table shows the different type of data and the charts that can be used to represent them effectively.

Type of chart	Data it represents
Column Chart	To show data changes over a period of time & for illustrating comparisons among items.
Bar Chart	Numerical Comparisons.
Line chart	Representing evenly spaced values
Scatter chart	Displaying and comparing numeric values, such as scientific, statistical, and engineering data.
Pie chart	Summarizing a set of categorical data or displaying the different values of a given variable
Doughnut chart	a Doughnut Chart shows the relationship of parts to a whole
Bubble chart	To Present Financial Data
Area chart	To find optimum combinations between two sets of data
Radar chart	Radar charts are useful when you want to look at several different factors all related to one item.

## Chart Templates

Sometimes, after creating a chart, we decide to use the same design in the future as well. This may prove to be tedious if we do it manually every time. Thus to do this easily, excel provides us the facility to save our charts as templates. To save a chart as template, after creating the chart, Right click on charts and select

"Save as Templates" and save your chart in the folder that opens. In the future, if you wish to use this template, you may do so by right clicking on the new chart. In the context menu that appears, click on "Change Chart Type". In the "Insert Chart" dialog box,

click "Templates". You will find all your saved templates here. Now, you may select the template you want to apply to the current chart.

## Chart Filter option

Another impressive feature is the chart filters option that lays out all variables (series) and categories for an interactive view. When you insert the chart, it was very difficult to filter the chart information.

If you want to see the information as per your requirement make use of Chart Filter button.

## Recommendations:

The insert tab is rich with new features from recommended pivot tables to recommended charts, Excel 2016 aims at letting you achieve the most in the minimum possible time. For the best outcome, use these recommendations to identify and benefit from pivot tables and charts that best suit your data overlay in the worksheet.

## Follow the steps:

- 1) Select the data to create a chart,
- 2) Click on Insert tab,
- 3) Select recommended chart options, you will get the following look with various chart types,
- 4) Select any one of them,
- 5) You will get again same look of chart as we have seen in the above example.

## Sparklines

Sparklines are tiny charts that fit in a cell - to visually summarize trends alongside data.

Sparklines show trends in a small amount of space, they are especially useful for dashboards or other places where you need to show a snapshot of your business in an easy-to-understand visual format.

For example, the following picture shows how a Sparkline lets you see at a glance how each department performed in May.

Create a Sparkline:

- 1) Select an empty cell or group of empty cells in which you want to insert one or more sparklines.
- 2) On the Insert tab, in the Sparklines group, click the type of Sparkline that you want to create: Line, Column, or Win/Loss.
- 3) In the Data box, type the range of the cells that contain the data on which you want to base the sparklines.
- 4) In earlier scenario, we have a line Sparkline, but Excel 2016 comes with some others such as "column Sparkline" and "win/loss Sparkline" shown below for the same dataset:

When one or more sparklines are selected, the Sparkline Tools appear, displaying the Design tab. On the Design tab, you can choose one or more of several commands from among the following groups: Sparkline, Type, Show/Hide, Style, and Group. Use these commands to create a new Sparkline, change its type, format it, show or hide data points on a line Sparkline, or format the vertical axis in a Sparkline group

## Customize Sparklines

After you create sparklines, you can control which value points are shown (such as the high, low, first, last, or any negative values), change the type of the sparkline (Line, Column, or Win/Loss), apply styles from a gallery or set individual formatting options, set options on the vertical axis, and control how empty or zero values are shown in the sparklines.

## Change the Style of Sparklines

Use the Style gallery on Design tab, which becomes available when you select a cell that contains a sparkline. Select a single sparkline or a sparkline group.

To apply a predefined style, on the Design tab, in the Style group, click a style or click the arrow at the lower right corner of the box to see additional styles.

To apply specific formatting to a sparkline, use the Sparkline Color or the Marker Color commands.