



# Introduction to Charts

## Introduction

It can often be difficult to interpret Excel workbooks that contain a lot of data. Charts allow you to illustrate your workbook data graphically, which makes it easy to visualise comparisons and trends.

## Understanding charts

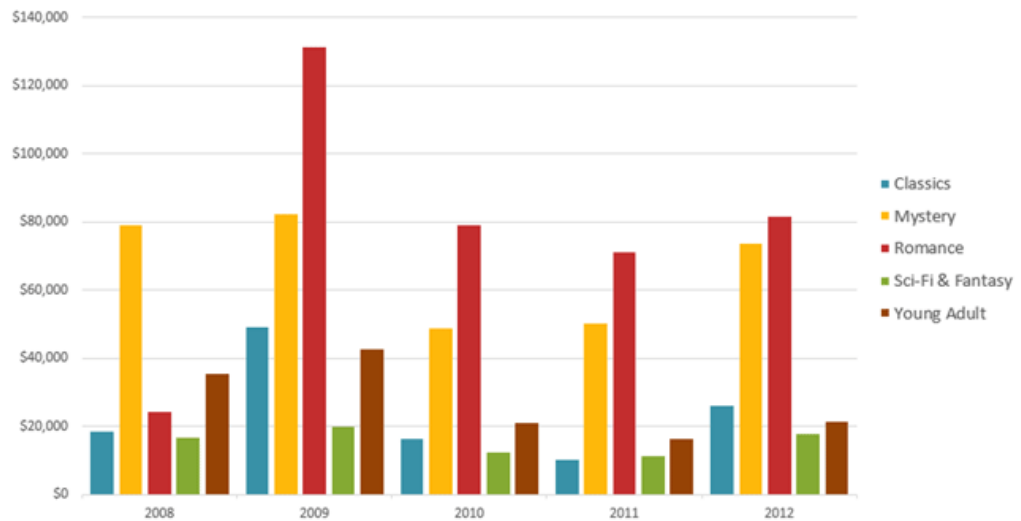
Excel has several different types of charts, allowing you to choose the one that best fits your data. In order to use charts effectively, you'll need to understand how different charts are used.

# Types of Charts



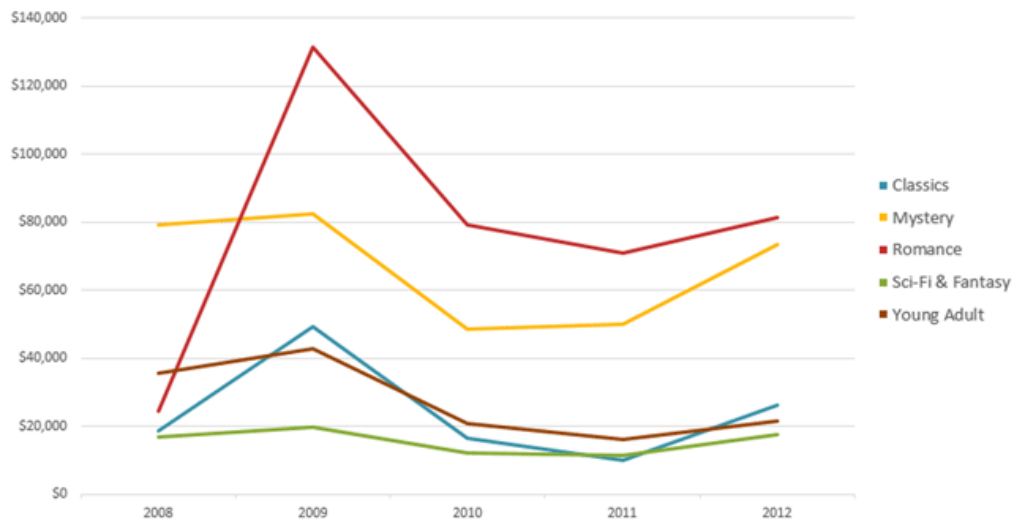
Excel has a variety of chart types, each with its own advantages.

## Column



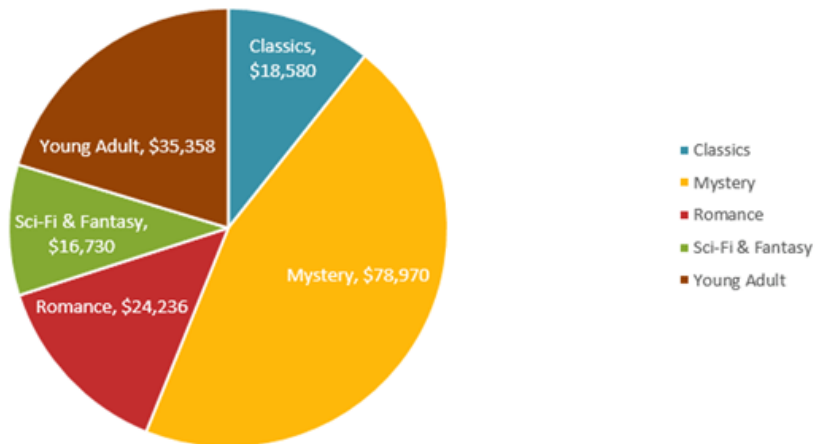
Column charts use vertical bars to represent data. They can work with many different types of data, but they're most frequently used for comparing information.

## Line



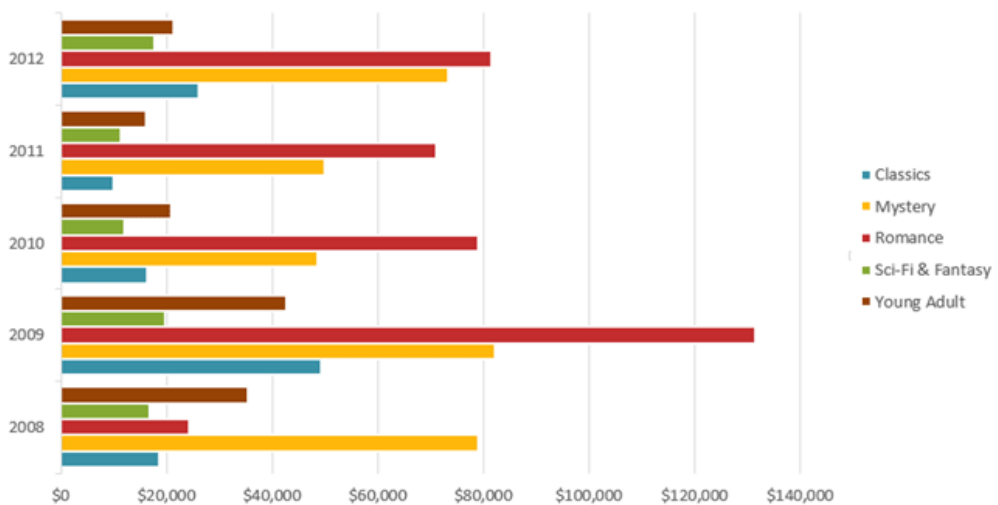
Line charts are ideal for showing trends. The data points are connected with lines, making it easy to see whether values are increasing or decreasing over time.

# Pie



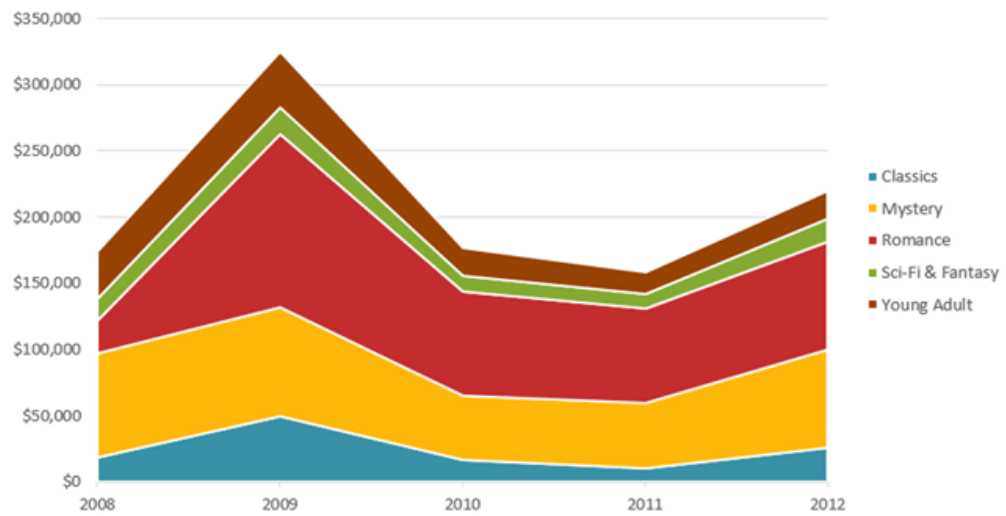
Pie charts make it easy to compare proportions. Each value is shown as a slice of the pie, so it's easy to see which values make up the percentage of a whole.

# Bar



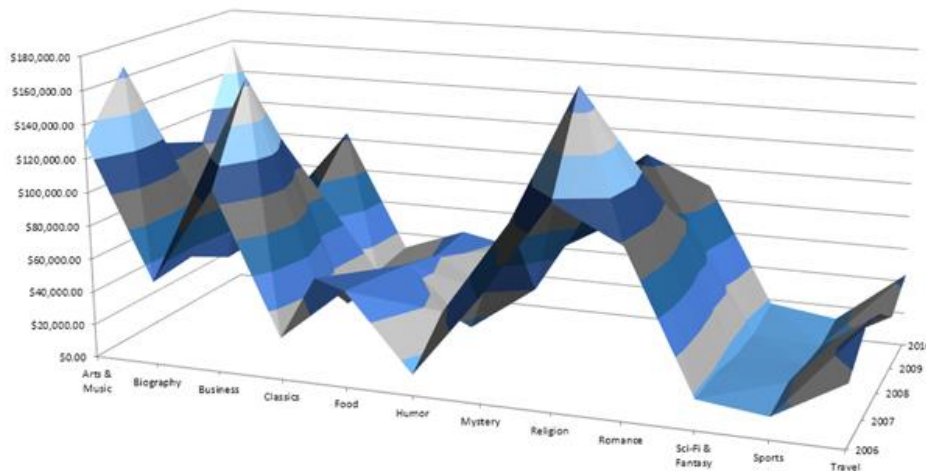
Bar charts work just like column charts, but they use horizontal bars instead of vertical bars.

## Area



Area charts are similar to line charts, except the areas under the lines are filled in.

## Surface



Surface charts allow you to display data across a 3D landscape. They work best with large data sets, allowing you to see a variety of information at the same time.

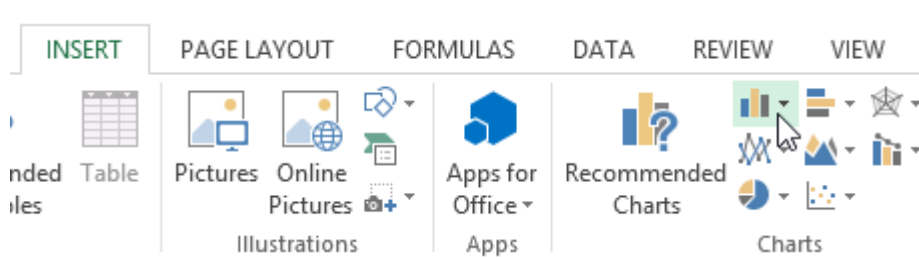
In addition to chart types, you'll need to understand how to read a chart. Charts contain several different elements, or parts that can help you interpret the data.

To insert a chart:

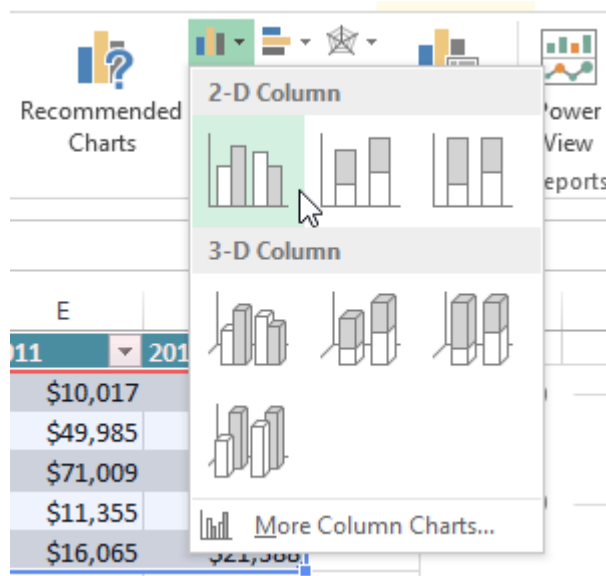
1. Select the cells you want to chart, including the column titles and row labels. These cells will be the source data for the chart. In our example, we'll select cells A1:F6.

	A	B	C	D	E	F	G
1	Genre	2008	2009	2010	2011	2012	
2	Classics	£18,580.00	£49,225.00	£16,326.00	£10,017.00	£26,134.00	
3	Mystery	£78,970.00	£82,262.00	£48,640.00	£49,985.00	£73,428.00	
4	Romance	£24,236.00	£131,390.00	£79,022.00	£71,009.00	£81,474.00	
5	Sci-Fi & Fantasy	£16,730.00	£19,730.00	£12,109.00	£11,355.00	£17,686.00	
6	Young Adult	£35,358.00	£42,685.00	£20,893.00	£16,065.00	£21,388.00	
7							
8							

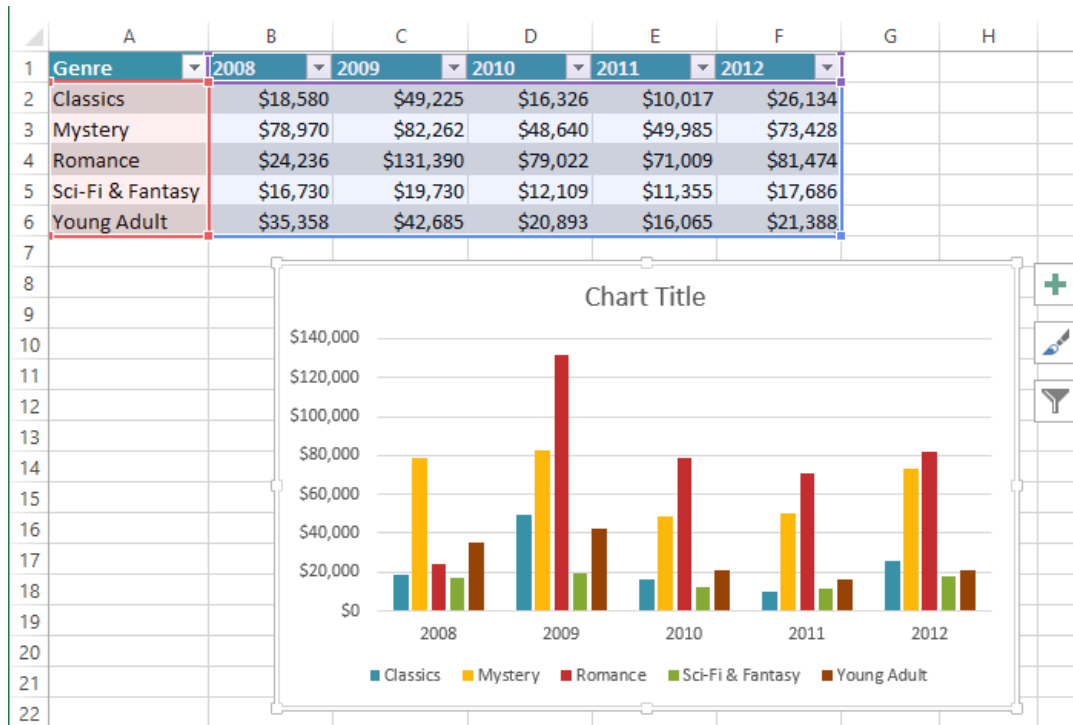
2. From the Insert tab, click the desired Chart command. In our example, we'll select Column.



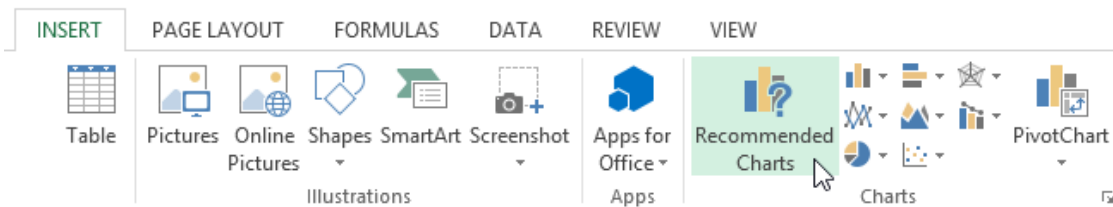
3. Choose the desired chart type from the drop-down menu.



4. The selected chart will be inserted in the worksheet.



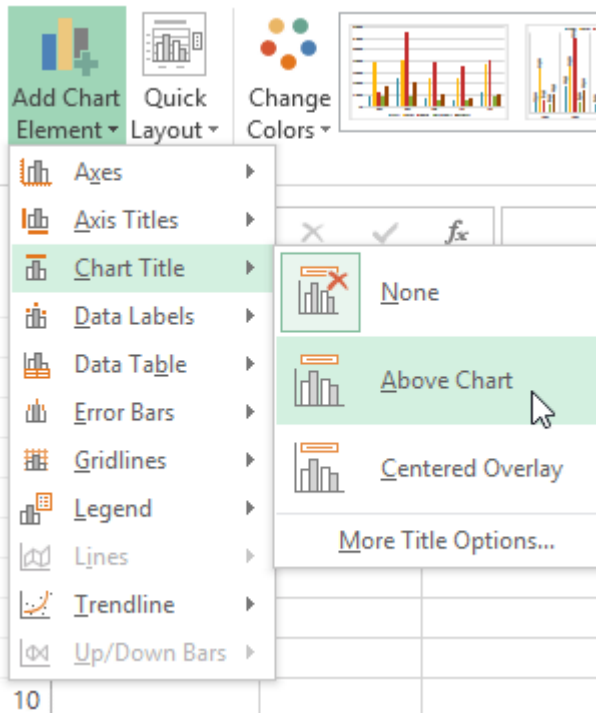
If you're not sure which type of chart to use, the Recommended Charts command will suggest several different charts based on the source data.



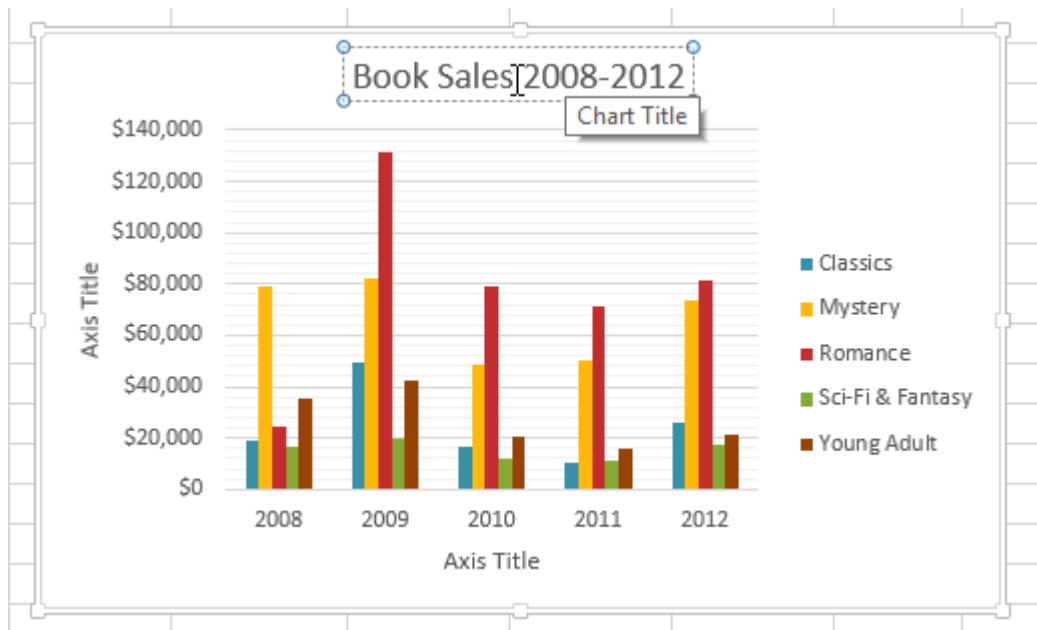
### Chart layout and style

After inserting a chart, there are several things you may want to change about the way your data is displayed. It's easy to edit a chart's layout and style from the Design tab.

- Excel allows you to add chart elements—such as chart titles, legends, and data labels—to make your chart easier to read. To add a chart element, click the Add Chart Element command on the Design tab, then choose the desired element from the drop-down menu.

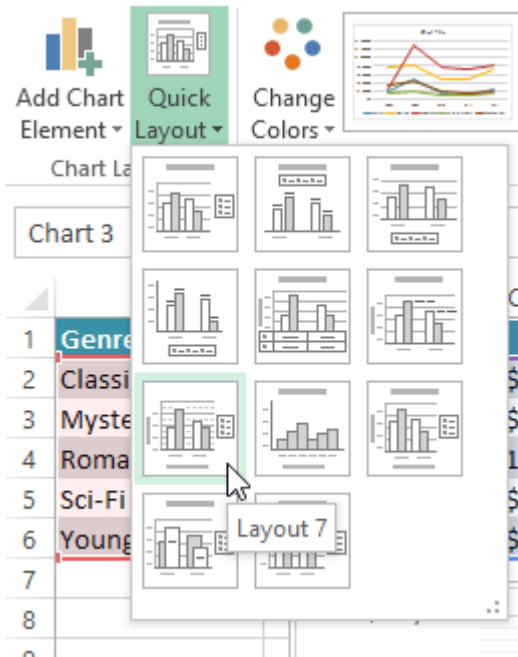


- To edit a chart element, like a chart title, simply double-click the placeholder and begin typing.

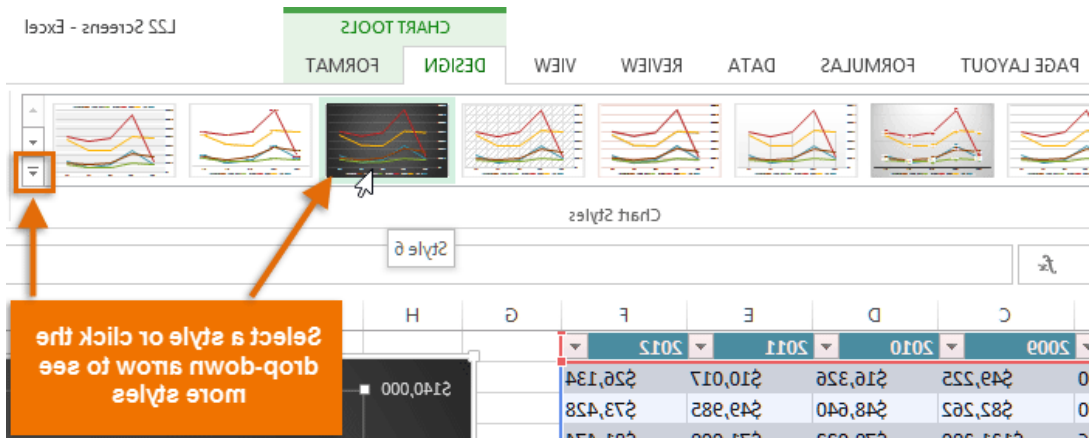


- If you don't want to add chart elements individually, you can use one of Excel's predefined layouts. Simply click the Quick Layout command, then choose the desired layout from the drop-down menu.

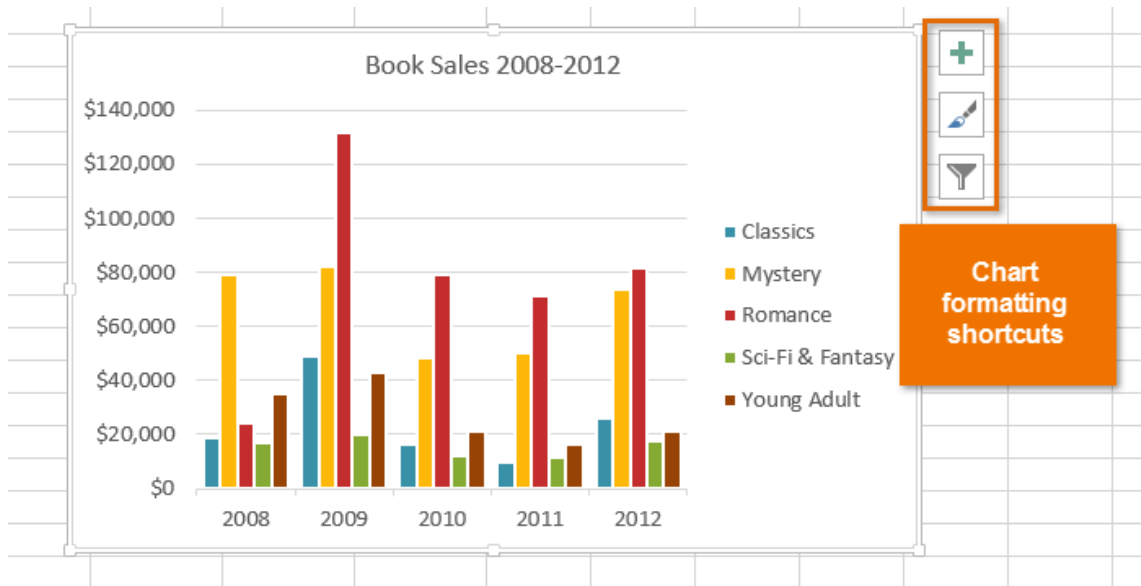




- Excel also includes several different chart styles, which allow you to quickly modify the look and feel of your chart. To change the chart style, select the desired style from the Chart styles group.



You can also use the chart formatting shortcut buttons to quickly add chart elements, change the chart style, and filter the chart data.

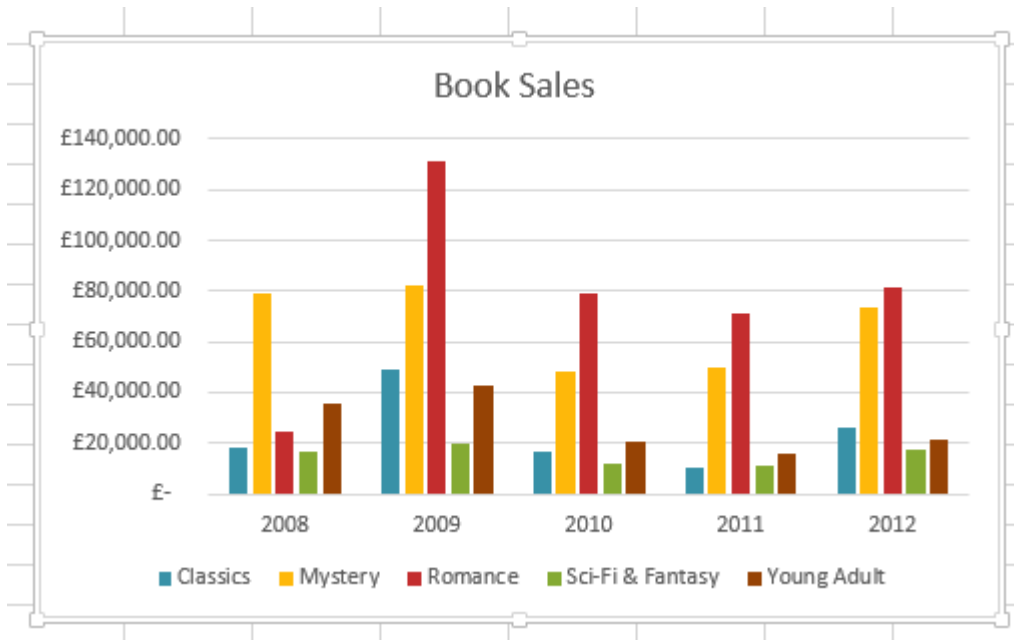


### Other chart options

There are many other ways to customize and organize your charts. For example, Excel allows you to rearrange a chart's data, change the chart type, and even move the chart to a different location in the workbook.

To switch row and column data:

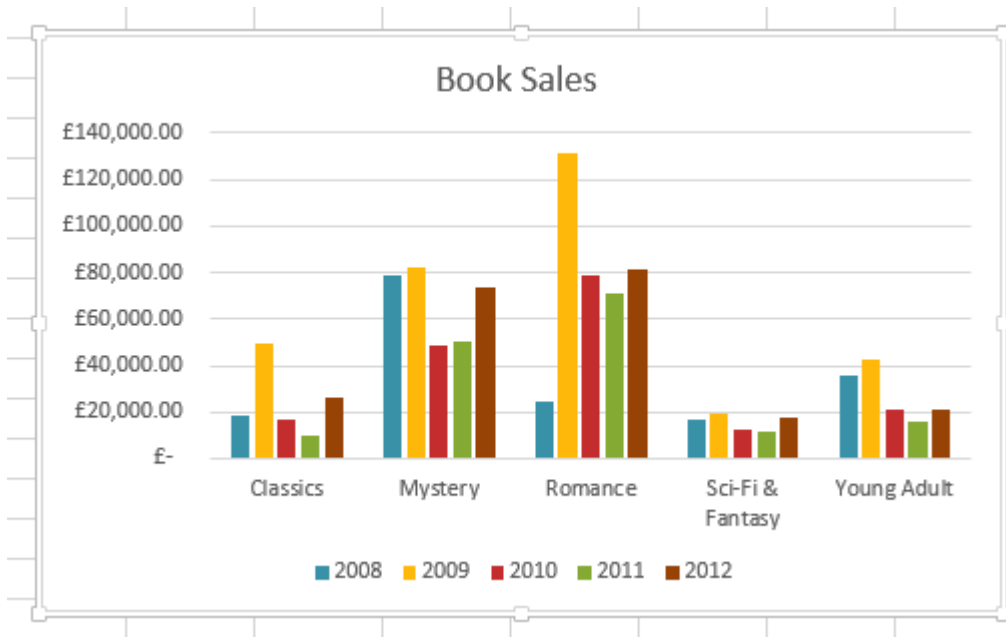
Sometimes you may want to change the way charts group your data. For example, in the chart below, the Book Sales data are grouped by year, with columns for each genre. However, we could switch the rows and columns so the chart will group the data by genre, with columns for each year. In both cases, the chart contains the same data—it's just organized differently.



1. Select the chart you want to modify.
2. From the Design tab, select the Switch Row/Column command.



3. The rows and columns will be switched. In our example, the data is now grouped by genre, with columns for each year.



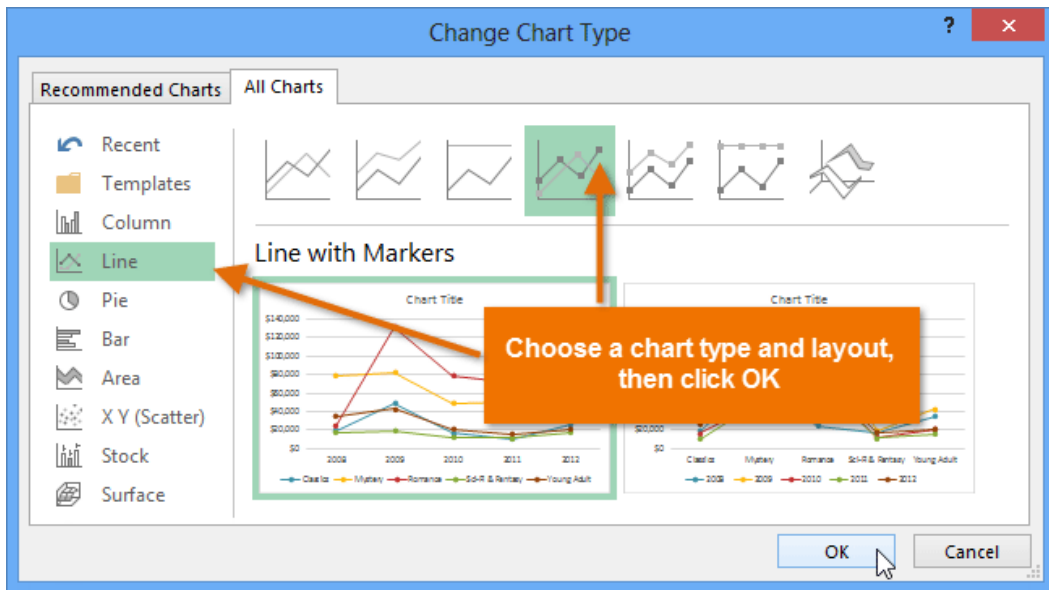
To change the chart type:

If you find that your data isn't well suited to a certain chart, it's easy to switch to a new chart type. In our example, we'll change our chart from a Column chart to a Line chart.

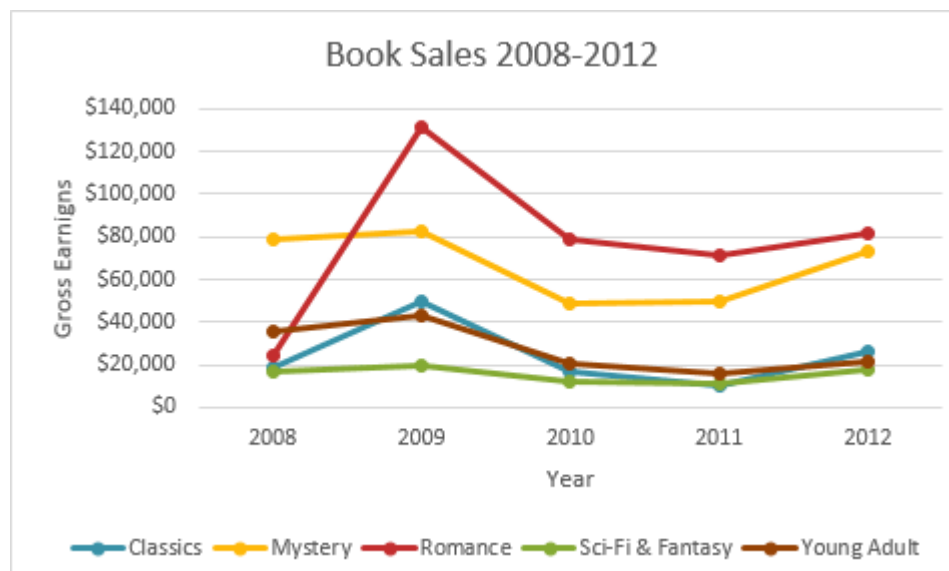
1. From the Design tab, click the Change Chart Type command.



2. The Change Chart Type dialog box will appear. Select a new chart type and layout, then click OK. In our example, we'll choose a Line chart.



3. The selected chart type will appear. In our example, the line chart makes it easier to see trends in the sales data over time.



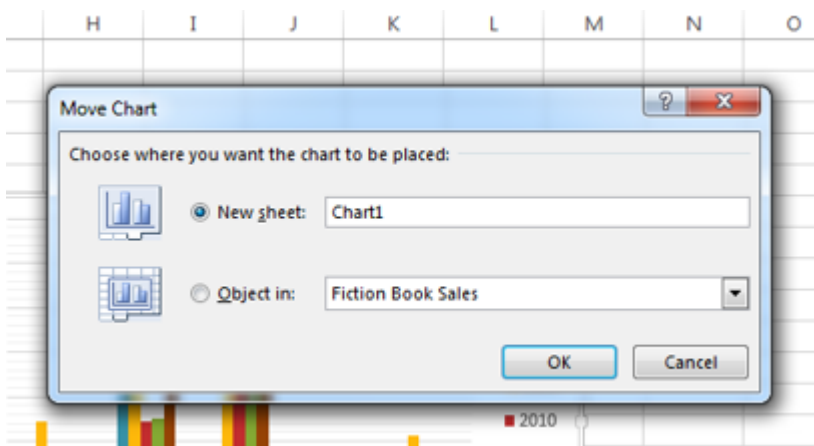
To move a chart:

Whenever you insert a new chart, it will appear as an object on the same worksheet that contains its source data. Alternatively, you can move the chart to a new worksheet to help keep your data organized.

1. Select the chart you want to move.
2. Click the Design tab, then select the Move Chart command.



3. The Move Chart dialog box will appear. Select the desired location for the chart. In our example, we'll choose to move it to a New sheet, which will create a new worksheet.
4. Click OK.



5. The chart will appear in the selected location. In our example, the chart now appears on a new worksheet.



Exercise!

1. Open an existing Excel workbook. If you want, you can use our practice workbook.
2. Use worksheet data to create a chart. If you are using the example, use the cell range A1:F6 as the source data for the chart.
3. Change the chart layout. If you are using the example, select Layout 8.
4. Apply a chart style.
5. Move the chart. If you are using the example, move the chart to a new worksheet named Book Sales Data: 2008-2012.

