Microsoft® Office 2013

First Course | Second Course | Third Course

Working with Charts

Objectives

- Plan a chart
- Create a chart
- Move and resize a chart
- Change the chart design

Objectives

- Change the chart format
- Format a chart
- Annotate and draw on a chart
- Create a pie chart

Plan a Chart

- Chart planning guidelines
  - Determine the purpose of the chart
  - Identify the data relationships you want to communicate graphically
  - Determine results you want to see
  - Decide which chart type is most appropriate

Plan a Chart

- Chart planning guidelines
  - Identify the worksheet data you want the chart to illustrate
  - Understand the elements of a chart

Plan a Chart

- Chart elements
  - The horizontal axis (x-axis) is also called the category axis
  - The vertical axis (y-axis) is also called the value axis
  - The z-axis is present in 3-D charts

Plan a Chart

- Chart elements
  - Area inside the horizontal and vertical axes is called the plot area
  - The scale of measure on the y-axis is identified by tick marks
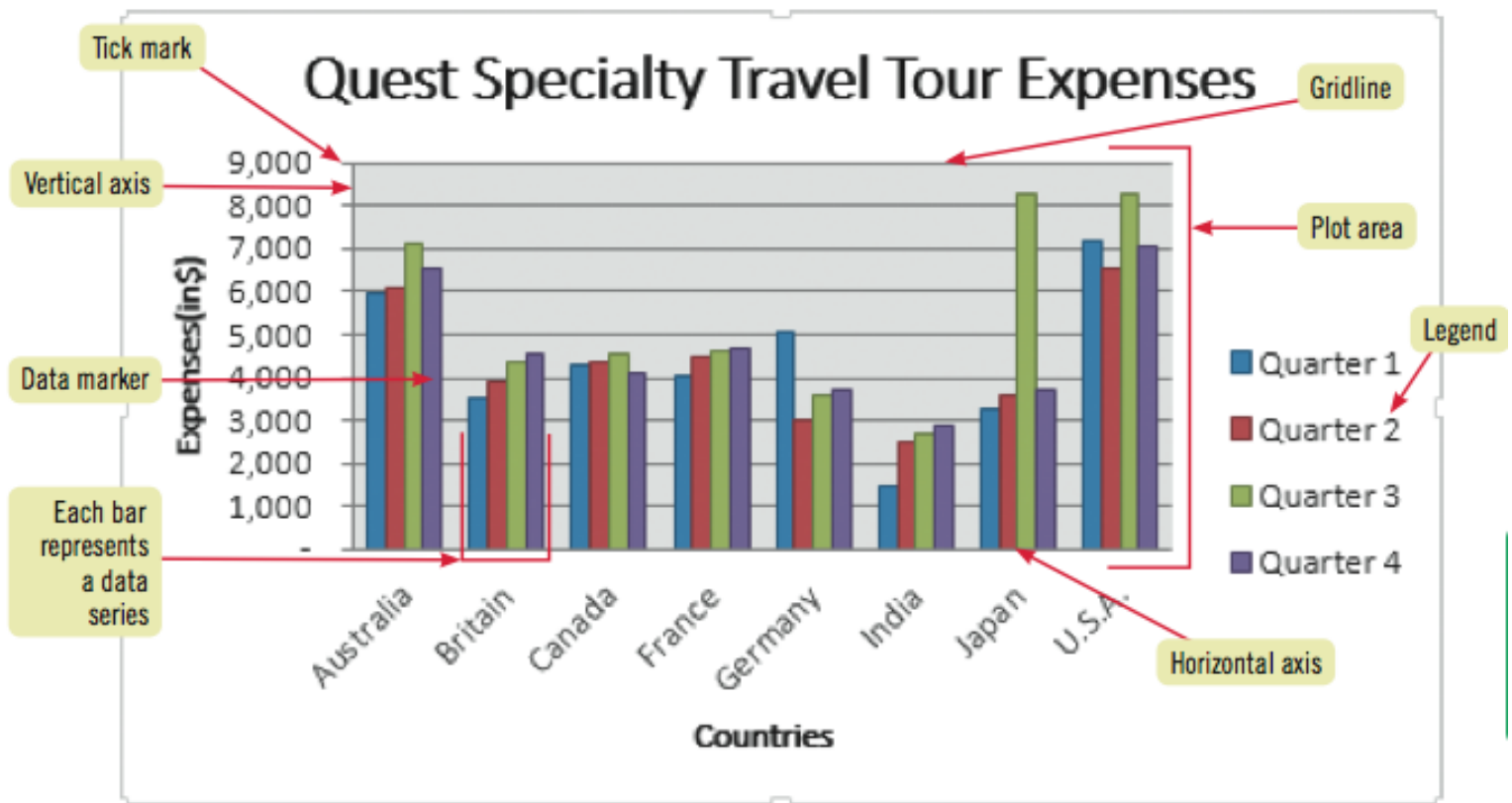 - A legend makes it easy to identify each data series

Plan a Chart

- Chart elements
  - A data point is the value in a cell you select for your chart
  - A data marker visually represents each data point in the chart
  - A group of related data points is a data series

Plan a Chart

Chart elements

Plan a Chart

Common chart types

type	button	description
Column		Compares data using columns; the Excel default; sometimes referred to as a bar chart in other spreadsheet programs
Line		Compares trends over even time intervals; looks similar to an area chart, but does not emphasize total
Pie		Compares sizes of pieces as part of a whole; used for a single series of numbers
Bar		Compares data using horizontal bars; sometimes referred to as a horizontal bar chart in other spreadsheet programs
Area		Shows how individual volume changes over time in relation to total volume
Scatter		Compares trends over uneven time or measurement intervals; used in scientific and engineering disciplines for trend spotting and extrapolation

Create a Chart

- To create a chart:
  - Select a range of data
  - Use buttons on the Insert tab of the Ribbon to create and modify a chart
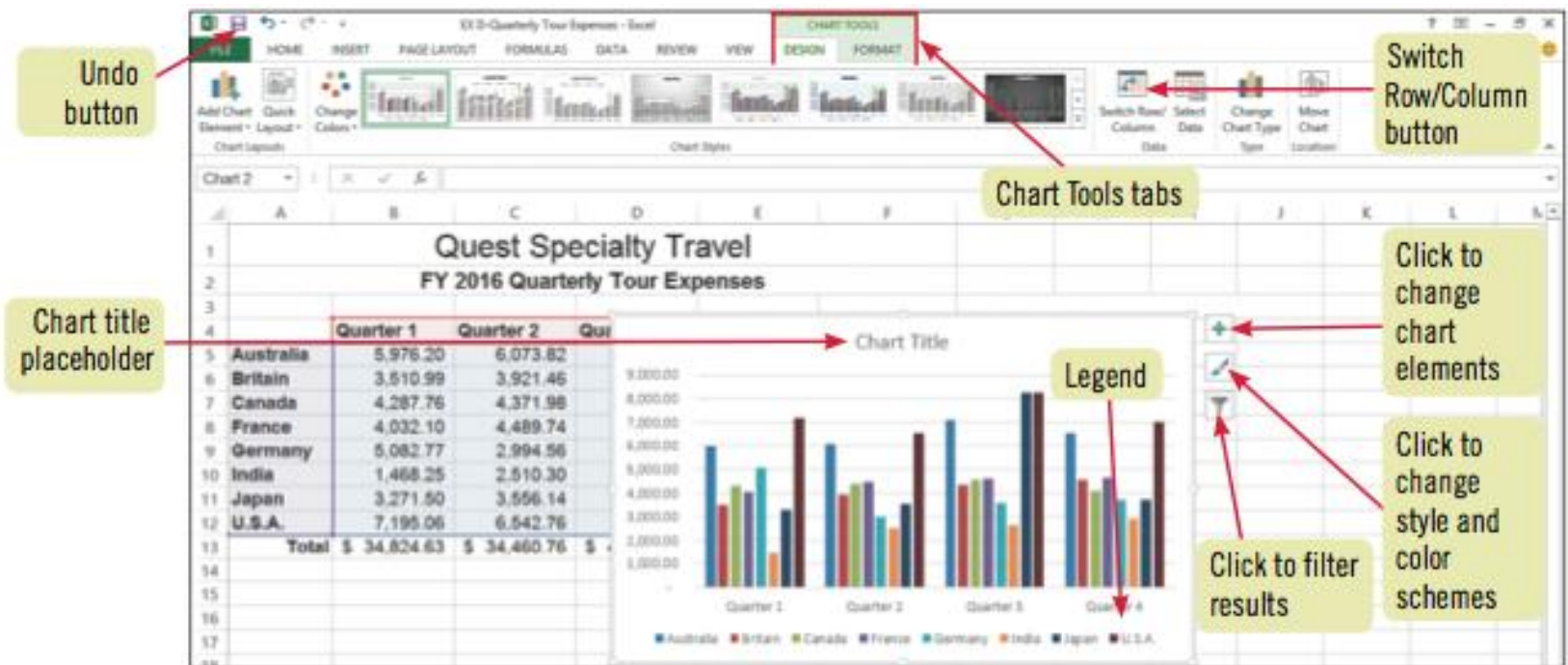
Create a Chart

- Sizing handles indicate that the chart is selected

- An embedded chart is one that is inserted directly in the current worksheet

- A chart sheet is a sheet in a workbook that contains only a chart, which is linked to the workbook data

Create a Chart

Clustered Column chart with
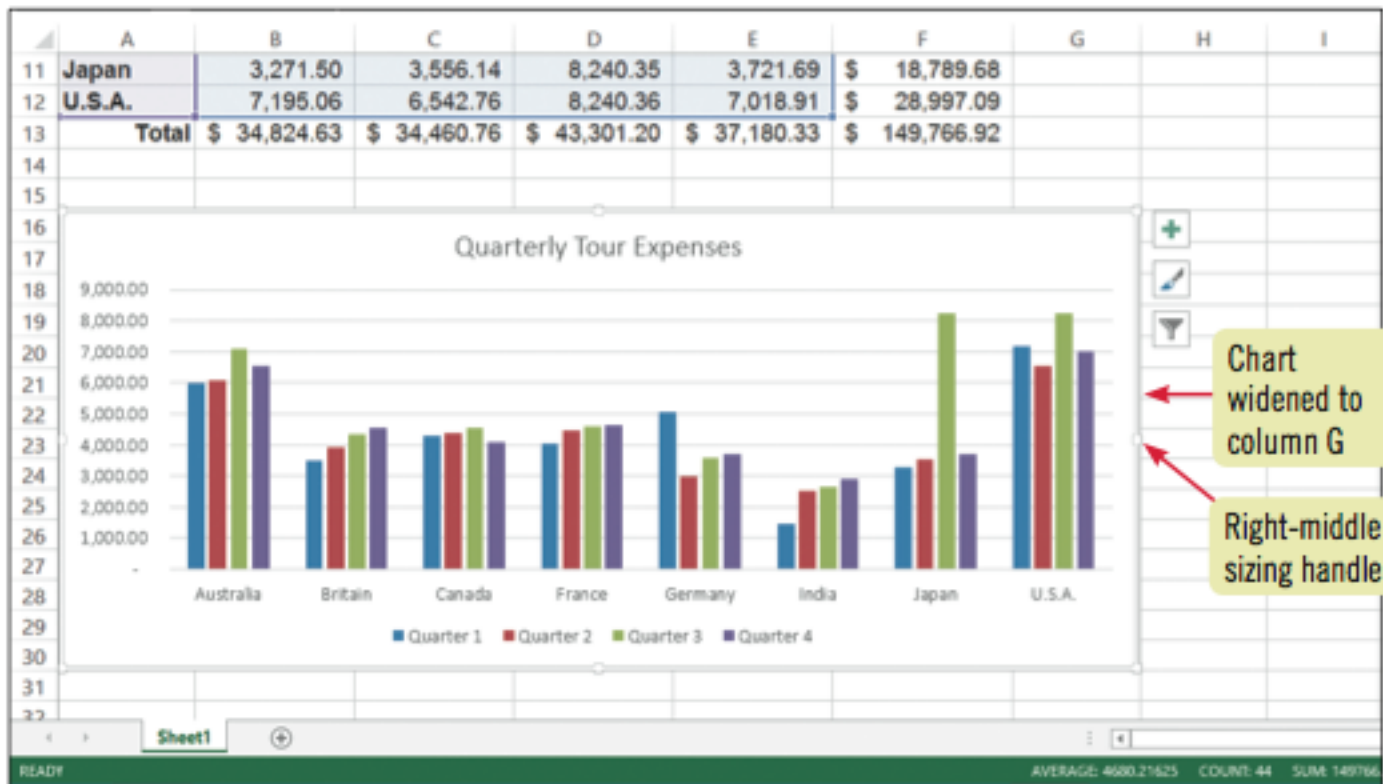different presentation of data

Move and Resize a Chart

- An object is an independent element on a worksheet
  - Moving a chart object does not affect formulas or data
  - Resize a chart by dragging its sizing handles;
  - Move a chart by dragging the chart itself

Move and Resize a Chart

Moved and resized chart

Change the Chart Design

- Changing data values in the worksheet automatically updates the chart

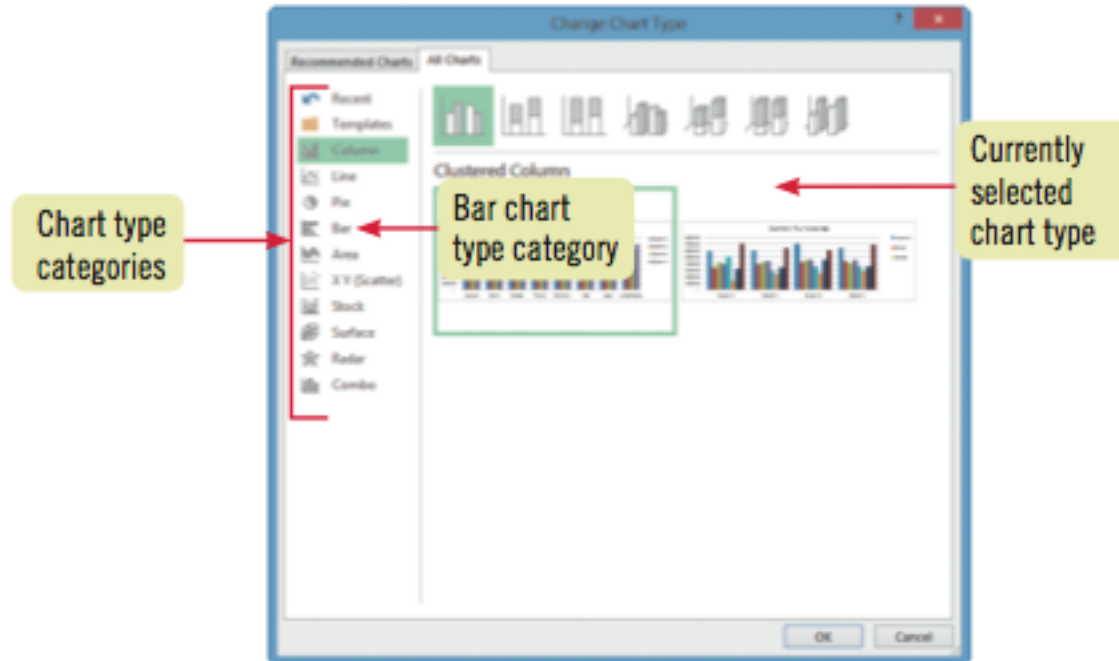- Chart Tools tabs can be used to make specific changes in a chart

Change the Chart Design

- Using the Chart Tools Design tab, you can:
  - Change the chart type
  - Modify the data range and configuration
  - Change the layout of objects
  - Choose from coordinating color schemes
  - Move the location of the chart

Change the Chart Design

Change Chart Type dialog box

Change the Chart Format

- Chart Elements button makes it easy to add, remove, and modify chart objects

- Using options on this shortcut menu:
  - Add text to a chart
  - Add and modify labels
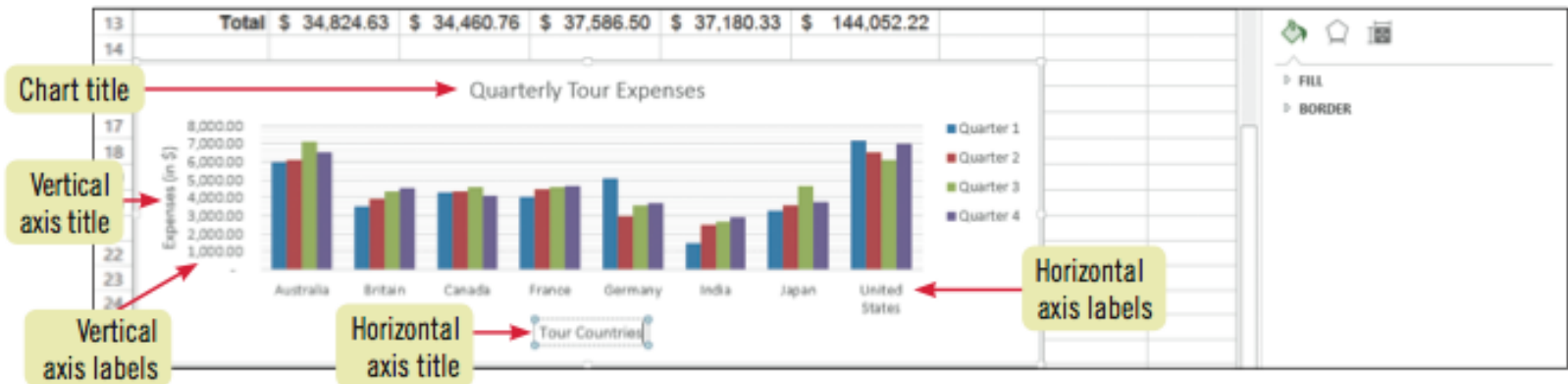 - Change the display of axes

Change the Chart Layout

- Using options on this shortcut menu::
  - Modify the fill behind the plot area
  - Eliminate or change the look of gridlines
  - Create titles for the horizontal and vertical axes
  - Eliminate or change the look of gridlines

Change the Chart Layout

Axis titles added to chart

Format a Chart

- Chart Tools Format tab can be used to make formatting enhancements
  - Change colors in a specific data series
  - Apply a style to a series using the Shape Styles group

Format a Chart

Live Preview of new style applied to data series
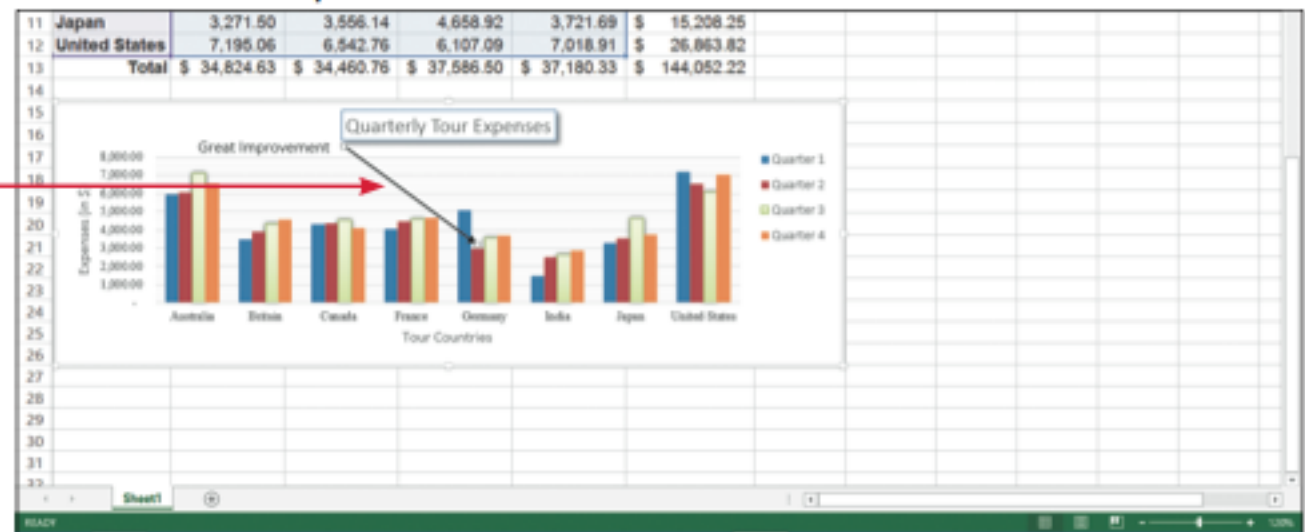
Annotate and Draw on a Chart

- A text annotation is a label that you add to a chart to further describe data

- You can add shapes such as arrows and boxes to a chart
  - Lines and arrows can be used to point out exact locations you want to emphasize

Annotate and Draw on a Chart

Text annotation and arrow shape add to chart

Create a Pie Chart

- You can create multiple charts based on the same worksheet data
  - Different chart types can be better at emphasizing different parts of the data
- In a pie chart, emphasize a data point by exploding, or pulling that slice away from the pie chart

Create a Pie Chart

Preview of worksheet with charts
in Backstage view

Fit Sheet on
One Page
setting

Show Margins
button

Summary

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- Change the chart design

Summary

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