

Inserting a Chart

Like the idiom “a picture is worth a thousand words”, a chart is often much better at presenting information than hard to read numbers in a table. This lesson explains how to insert a chart in Microsoft PowerPoint.

Navigate to the slide where you want to insert the chart.

Click the **Insert** tab on the Ribbon and click the **Chart** button in the Illustrations group.

The Insert Chart dialog box appears.

Other Ways to Insert a Chart:

Click the **Insert Chart** placeholder on the slide. To insert a slide with placeholders, click the **New Slide** button list arrow in the Slides group on the Home tab and select a slide with placeholders.

Select a chart type from the list, and then select a chart sub-type. Click **OK**.

The chart is inserted onto the slide, and an Excel 2010 worksheet opens in a split window.

Tip: If you don't have Office Excel 2010 installed, a Microsoft Graph datasheet appears instead of an Excel worksheet. You can use Microsoft Graph the same as you would Excel, you just don't have as many options.

Exercise

Exercise File: Tourism9-1.pptx

Exercise: Navigate to Slide 2 and use the Insert tab on the Ribbon to open the Insert Chart dialog box. Select the Pie in 3-D chart and click OK.

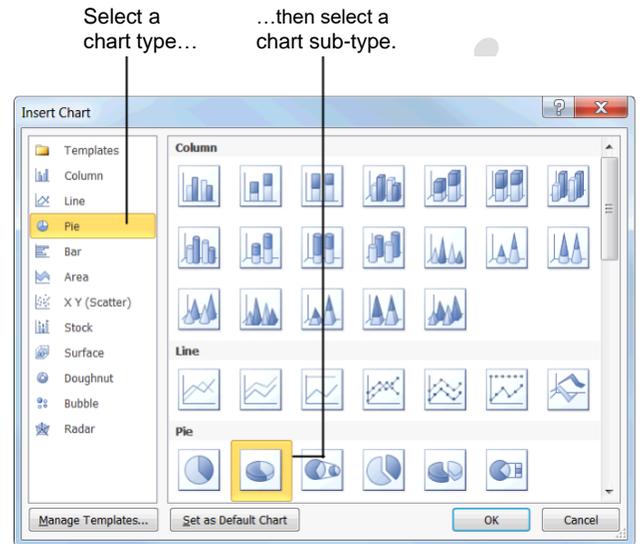


Figure 9-1: The Insert Chart dialog box.

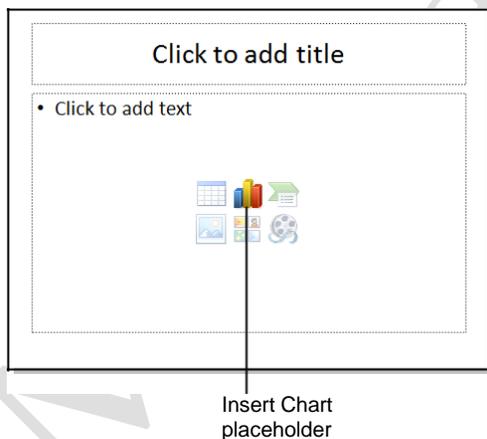


Figure 9-2: Another way to insert a chart is to click the Insert Chart placeholder.

Table 9-1: Common Chart Types

Column	Column charts are used when you want to compare different values vertically, side-by-side.
	Line charts are used to illustrate trends. Each value is plotted as a point on the chart and is connected to other values by a line.
Line	
Pie	Pie charts are useful for showing values as a percentage of a whole. The values for each item are represented by different colors.
	Bar charts are just like column charts, except they display information in horizontal bars rather than in vertical columns.
Bar	
XY (Scatter)	Scatter charts are used to plot clusters of values using single points. Multiple items can be plotted by using different colored points or different point symbols.
	Area charts are the same as line charts, except the area beneath the line is filled with color.
Area	

Inserting Chart Data

After you insert a chart, you need to replace the sample data in the worksheet with your own information.

Click the cell you want to add text to.

Take a look at Table 9-2: Navigation Shortcuts for a few navigation shortcuts.

Type your text.

The sample data is replaced with your own, and the chart updates to reflect your changes.

When you're finished entering data, click the **Close** button in the Excel window.

Excel closes and you return to the PowerPoint window.

Tips

To insert more rows and columns of data in the Excel worksheet, click and drag the lower corner of the cell range.

To edit a chart's data, select the chart, click the **Design** tab on the Ribbon, and click the **Edit Data** button in the Data group to open the Excel worksheet.

Exercise

Exercise File: Tourism9-2.pptx

Exercise: If necessary, navigate to Slide 2 and select the chart.

In the Excel worksheet, click cell B1 and type "Tourist Arrivals".

Click cell A2 and type "France", then press <Tab> and type "76".

Finish entering the following information into the worksheet, pressing <Tab> after each entry:

Spain	56
U.S.	50
China	47
Italy	37

Table 9-2: Navigation Shortcuts

<Tab>	Moves to the right one cell.
<Shift> + <Tab>	Moves to the left one cell.
<Enter>	Moves down to the next cell.
<><><>	Moves in the direction of the arrow key pressed.

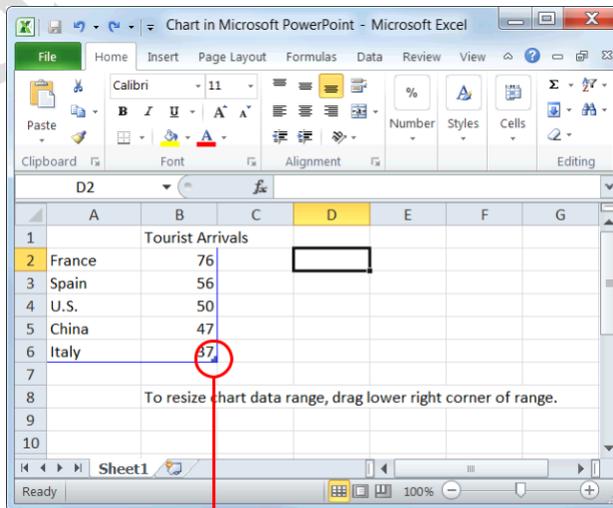


Figure 9-3: The Excel worksheet. To add more rows and columns, click and drag the lower right corner of the cell range.

Resizing and Moving a Chart

When you create a chart, it is embedded in the presentation and appears in a frame. Sometimes your chart might be too large, or positioned in the wrong spot on a slide. Luckily, you can resize or move a chart to meet your needs.

Resize a chart

Make an object larger or smaller by resizing it.

Click the chart to select it.

Eight sizing handles appear along the frame of the chart, as shown in Figure 9-4.

Click and drag one of the chart's sizing handles.

A faint outline appears as you drag, allowing you to preview the size of the chart.

Tip: To maintain the chart's proportions while resizing, hold down the **<Shift>** key as you drag.

Release the mouse button.

The chart is resized.

Other Ways to Resize a Chart:

Click the **Format** tab on the Ribbon under Chart Tools, and use the **Height** and **Width** fields in the Size group.

Move a chart

By simply clicking and dragging with the mouse, you can move a chart to a new location on the slide.

Click the chart to select it, and click and drag the frame of the chart.

A faint outline appears as you drag, allowing you to preview the location of the chart.

Release the mouse button when the chart is positioned where you want it.

Exercise

Exercise File: Tourism9-3.pptx

Exercise: If necessary, navigate to Slide 2. Resize and move the chart so that it fits on the right-hand side of the slide, as shown in the diagram below.

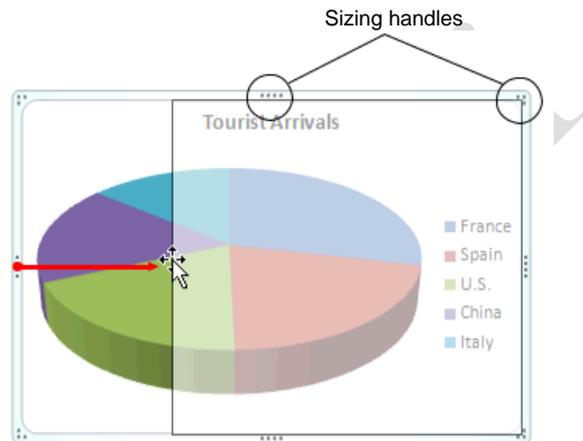


Figure 9-4: To resize a chart, simply click and drag one of its sizing handles.

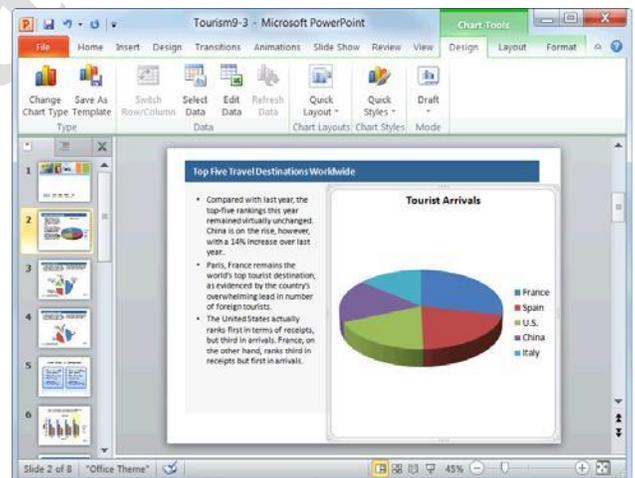


Figure 9-5: The updated slide.

Changing Chart Type

Different types of charts are better for presenting different types of information. For example, a column chart is great for comparing values of different items, but not for illustrating trends or relationships. If you find that a chart you've created isn't the best fit for your data, you can switch to a different chart type.

Select the chart.

Under Chart Tools on the Ribbon, click the **Design** tab and click the **Change Chart Type** button in the Type group.

The Change Chart Type dialog box appears.

Select a chart type from the list, and then select a chart sub-type. Click **OK**.

The chart type is changed.

- **Other Ways to Change Chart Type:** Right-click the chart frame and select **Change Chart Type** from the contextual menu. Select a new chart type and click **OK**.

✓ Tips

Changing chart type only changes how data is displayed; it does not alter the data itself.

Exercise

Exercise File: Tourism9-4.pptx

Exercise: If necessary, navigate to Slide 2 and select the chart.

Click the Design tab on the Ribbon, click the Change Chart Type button in the Type group, and select the Clustered Column bar chart.

Click OK.

Change Chart Type button

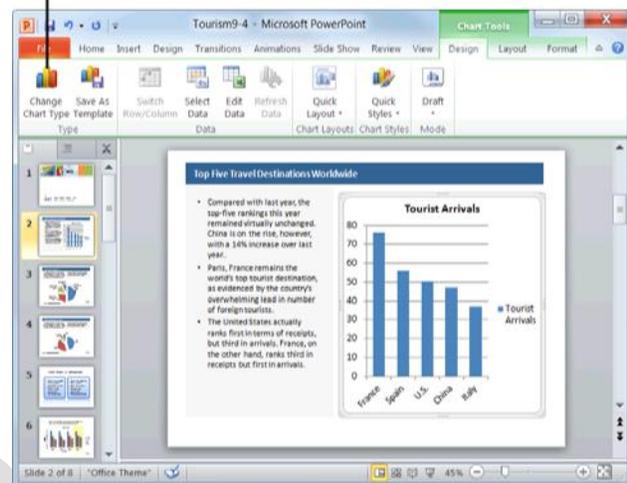


Figure 9-6: The updated presentation.

Formatting a Chart

PowerPoint 2010 has a variety of built-in chart layouts and styles that allow you to format your charts with the click of a button.

Change chart layout

Built-in chart layouts allow you to quickly adjust the overall layout of your chart with different combinations of titles, objects, and chart orientations.

Select the chart and click the **Design** tab on the Ribbon under Chart Tools.

Select a layout from the Chart Layouts group.

The selected layout is applied to the chart.

Tip: To view all the available layouts, click the **More** button (☰) in the Chart Layouts group to display the Chart Layouts gallery.

Change chart style

Changing the visual style of a chart is an easy way to spice up its appearance. A visual style is a set of different formatting commands that can be applied to a chart in a single step.

Select the chart and click the **Design** tab on the Ribbon under Chart Tools.

Select a style from the Chart Styles group.

The selected style is applied to the chart.

Tip: To view all the available styles, click the **More** button (☰) in the Chart Styles group to display the Chart Styles gallery.

Exercise

Exercise File: Tourism9-5.pptx

Exercise: Navigate to Slide 6 and select the chart. Apply Layout 10 to the chart.

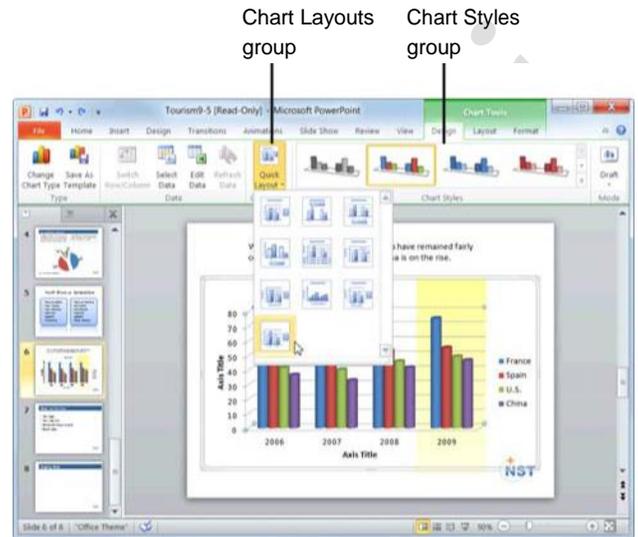


Figure 9-7: Depending on the size of your program screen, you might need to click the Quick Layout button in the Chart Layout group to display the Chart Layouts gallery.

Mustafa

Working with Labels

A *label* is an area of text that identifies a specific part of a chart. Titles, legends and tables are all examples of labels.

Insert or modify a label

You can insert a new label, or adjust how it appears.

Select the chart and click the **Layout** tab on the Ribbon under Chart Tools.

In the Labels group, you have several labels to choose from:

Chart Title: Add, remove or position the chart title.

Axis Titles: Add, remove or position the text used to label the chart axes.

Legend: Add, remove or position the chart legend.

Data Labels: Use data labels to label the values of individual chart elements.

Data Table: Add a data table to the chart.

✔ **Tip:** Different chart types contain different chart labels, so some of the options listed above might not be available.

Click the appropriate button in the Labels group.

A list of options relative to the selected label appears.

Select an option from the list.

✔ **Tip:** If you don't see a label option that suits you, click the **More Options** button to fine-tune the label to meet your needs.

Edit label text

You can edit label text to meet your needs.

Select the chart and select the label whose text you want to edit.

Click inside the label to enter editing mode.

A blinking cursor appears inside the label.

Edit the label text as necessary.

Other Ways to Do Something:

Right-click the label and select **Edit Text** from the contextual menu. Edit the text as necessary.

Exercise

Exercise File: Tourism9-6.pptx

Exercise: If necessary, navigate to Slide 6. Select the chart and click the Layout tab on the Ribbon.

Click the Chart Title button in the Labels group and select Above Chart from the list.

Type "Tourism in Millions".

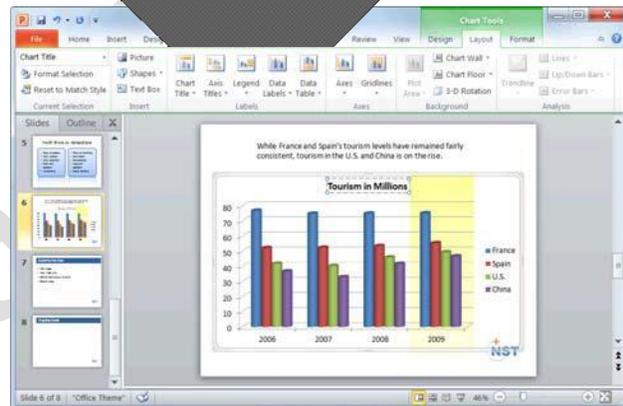
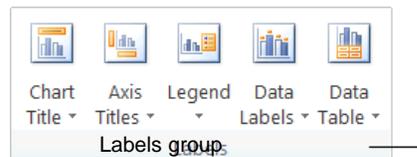


Figure 9-8: Use the Labels group on the Layout tab to adjust chart labels.

Formatting Chart Elements

If none of PowerPoint's default chart layouts and styles meet your needs, you can format chart elements—such as shapes and axes—individually.

Format a chart element

You can use the Format tab to change the look of individual chart elements.

Select the chart element you want to format.

- Other Ways to Select a Chart Element:** Click the **Format** tab on the Ribbon under Chart Tools and click the list arrow in the Current Selection group. Select an element from the list.

Click the **Format** tab on the Ribbon under Chart Tools.

The commands on the Format tab are organized into groups:

Current Selection: Click the list arrow and select the chart element that you want to format. Click the **Format Selection** button to display the Format dialog box, giving you additional formatting options.

Shape Styles: Click the **More** button to display the Shape Styles gallery. Or, click the **Shape Fill**, **Shape Outline**, or **Shape Effects** button list arrows to select additional options.

WordArt Styles: Select an element that includes text or numbers and select a style from the WordArt Styles gallery. Or, click the **Text Fill**, **Text Outline**, or **Text Effects** button list arrows to select additional options.

Arrange: Click the **Selection Pane** button to display the Selection pane, where you can select individual chart elements to format. Use the other commands in this group to change the order of overlapping elements or adjust their alignment and distribution.

Select the formatting command you want to use, and any additional options as necessary.

- Other Ways to Format a Chart Element:** Right-click the element and select **Format** from the contextual menu. Make your selections in the dialog box and click **Close** when you're finished.

Exercise

Exercise File: Tourism9-7.pptx

Exercise: Navigate to Slide 3. Click the Format tab on the Ribbon under Chart Tools, and click the Chart Element list arrow in the Current Selection group.

Select Inbound Tourism by Purpose of Visit, 2009 to select each individual pie piece.

Apply a shadow effect to the selected pie pieces.

When you're finished, navigate to Slide 2 and delete the chart legend.

Current Selection list arrow



Figure 9-9: You can also use the Current Selection list arrow to select a chart element or group of elements.

Delete a chart element

If you decide you don't need a specific chart element, you can delete it.

Select the chart element you want to delete.

Press <Delete>.

Tips

To change the location of a chart element, click and drag the chart element to a new location in the frame.

Many chart elements cannot be resized individually.

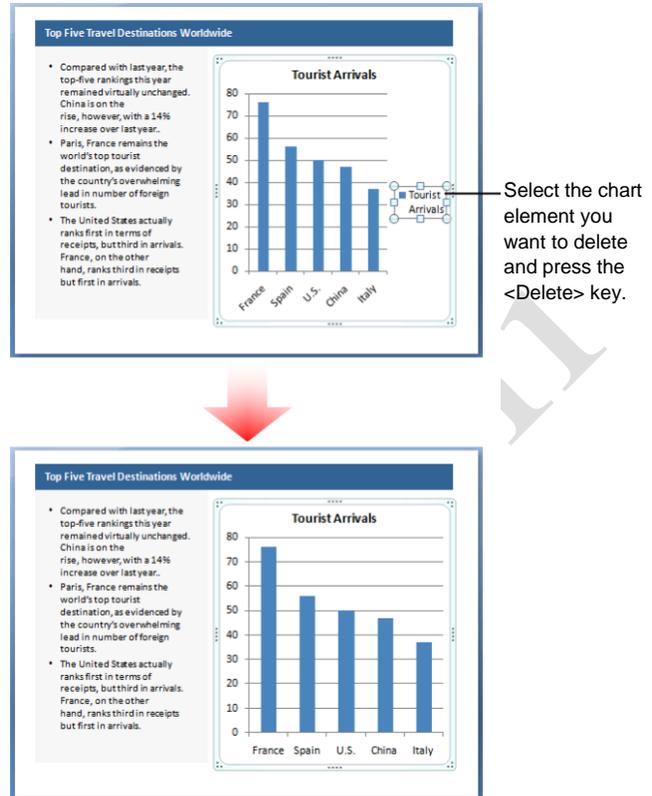


Figure 9-10: Deleting a chart element.

Creating a Chart Template

After you've customized your chart, you can save that chart as a chart template. Saving a chart as a chart template lets you apply the chart's formatting to another chart with new data.

Save a chart as a chart template

Select the chart you want to save.

The Chart Tools tabs appear on the Ribbon.

Click the **Design** tab under Chart Tools on the Ribbon.

Click the **Save As Template** button in the Type group.

The Save Chart Template dialog box appears.

Click the **File** name text box, enter a name for the template, and click **Save**.

The chart is saved as a template.

Apply a chart template to a chart

After you insert a new chart into your presentation, you can apply a chart template to the new chart.

Select the chart to which you want to apply the template.

Click the **Design** tab under Chart Tools on the Ribbon.

Click the **Change Chart Type** button in the Type group.

The Change Chart Type dialog box appears.

Select **Templates**.

A list of your saved templates appears.

Select the chart template that you wish to use and click **OK**.

The chart template is applied to the chart.

Exercise

Exercise File: Tourism 9-8.pptx

Exercise: If necessary, go to Slide

3. Save the chart as a chart template.

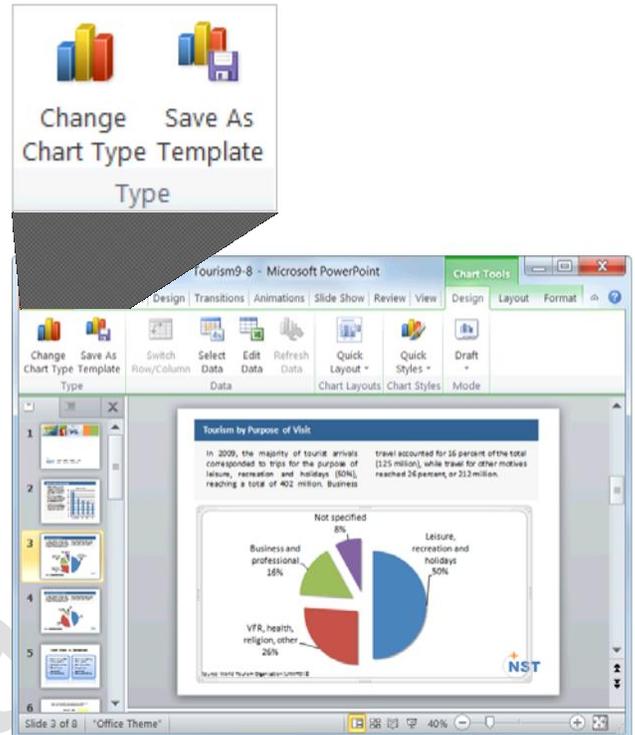


Figure 9-11: Save a chart as a template to reuse the chart with new data.

Find your templates in the Templates folder.

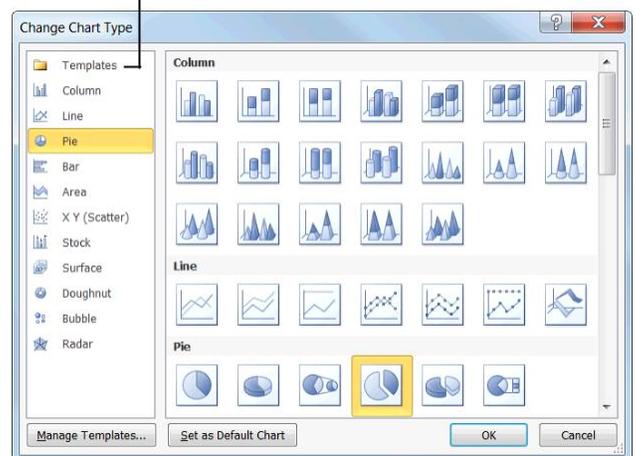


Figure 9-12: The Change Chart Type dialog box.

Inserting SmartArt

The SmartArt feature lets you create and customize designer-quality diagrams. You can even convert bulleted lists into a diagram using the SmartArt diagram tools.

Insert a SmartArt graphic

Click the **Insert** tab on the Ribbon and click the **SmartArt** button in the Illustrations group.

The Choose a SmartArt Graphic dialog box appears. Here you need to select the type of graphic you want to insert.

Select a chart or diagram type, then select a chart or diagram.

The table to the right describes each type of SmartArt graphic available.

Click **OK**.

The SmartArt object is inserted in the document.

Add text to a SmartArt graphic

There are two ways to add text to a SmartArt graphic: using the Text pane or the graphic itself.

Click the **[Text]** placeholder where you want to insert your text.

A blinking cursor appears, indicating that you can type your text.

Enter the text you want to use in the graphic.

Other Ways to Add Text to SmartArt:

Click a bullet in the Text pane and type your text. If the Text pane is not visible, click the **tab** in the middle of the left border of the SmartArt graphic. Or, select the SmartArt graphic and click the **Design** tab on the Ribbon under SmartArt Tools. Click the **Text Pane** button in the Create Graphic group.

Tips

In the Text pane, use the **up** or **down** arrow keys on your keyboard to move between placeholders.

To add an additional placeholder, press **<Enter>** in the Text pane.

To close the Text pane, click its **Close** button.

Exercise

Exercise File: Tourism9-9.pptx

Exercise: Navigate to Slide 8 and click the Insert tab on the Ribbon.

Click the SmartArt button in the Illustrations group, select the Vertical Block List diagram, and click OK.

Enter the following text into the SmartArt

graphic: Focus on existing clients

Improve points of contact

Track marketing info

Table 9-3: SmartArt Graphics

List	Show non-sequential information.
Process	Show steps in a process or timeline.
Cycle	Show a continual process.
Hierarchy	Create an organization chart or decision tree.
Relationship	Illustrate connections.
Matrix	Show how parts relate to a whole.
Pyramid	Show proportional relationships with the largest component on the top or bottom.
Picture	Create a SmartArt graphic that incorporates pictures

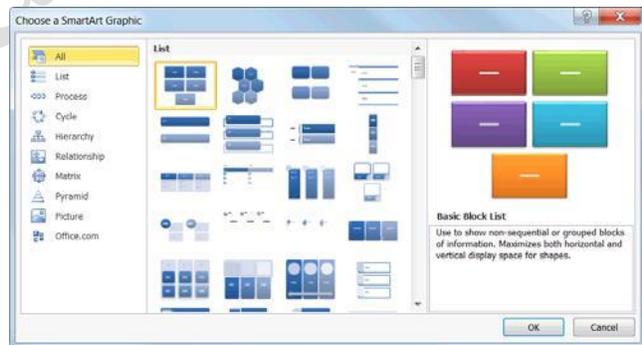


Figure 9-13: The Choose a SmartArt Graphic dialog box.

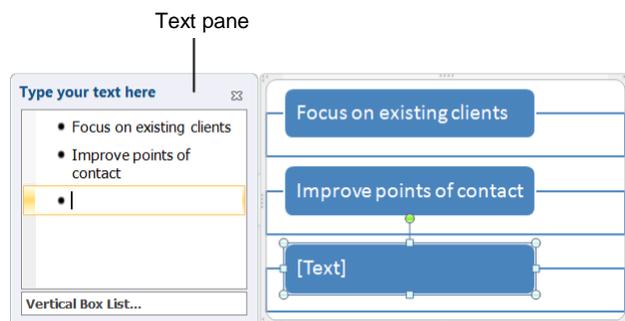


Figure 9-14: The Vertical Box List SmartArt graphic.

Edit text in a SmartArt graphic

Once you've had a chance to edit your document, you may need to rearrange text in the SmartArt graphic. PowerPoint makes it easy for you to rearrange text without worrying about retyping, cutting, copying, or pasting.

Select the text you wish to move.

The SmartArt tools appear on the Ribbon.

Click the **Design** tab under SmartArt Tools on the Ribbon.

The Create Graphic group lists several options for rearranging your text. Read more about each option in the table to the left.

Select the option you wish to use in the Create Graphic group.

Your text is moved.

Add a picture to a SmartArt graphic

If you choose a Picture SmartArt layout, follow these steps to include a picture in your graphic.

Insert a SmartArt picture graphic into your document.

The SmartArt graphic appears.

Click the picture icon.

The Insert Picture dialog box appears.

Find and select the picture you want to insert and click **Insert**.

The picture is inserted into your SmartArt graphic.

Table 9-4: Text Options

Promote	Moves a bullet point up one level.
Demote	Moves a bullet point down one level.
Right to Left	Changes the text order to read right to left.
Reorder Up	Moves a bullet point up in a list.
Reorder Down	Moves a bullet point down in a list.
Layout	This option is only available for organizational charts. Changes the layout of your organizational chart.



Figure 9-15: Click the picture icon to insert a picture into a SmartArt Graphic.

Working with SmartArt Elements

In order to create an effective SmartArt graphic, you need to know how to work with its elements. This includes adding new shapes, replacing shapes with different ones, or removing those you don't need. This lesson will show you how to do all of this and more.

Add a shape

Adding shapes to a SmartArt graphic is extremely easy.

Select the SmartArt graphic that you want to add a shape to.

Select the shape that is closest to where you want to add the new shape.

Under SmartArt Tools on the Ribbon, click the **Design** tab and click the **Add Shape** button list arrow in the Create Graphic group.

A list of location options appears.

Select a location from the list.

The new shape is inserted in the location specified.

Other Ways to Add a Shape:

In the Text pane, place your cursor at the beginning or end of line of text. Press **<Enter>**.

Change a shape

You can also change a shape without replacing the text in the shape.

Select the SmartArt shape that you want to change.

Select the shape that you want to replace.

Under SmartArt Tools on the Ribbon, click the **Format** tab and click the **Change Shape** button in the Shapes group.

The Shapes Gallery appears.

Select a shape from the gallery.

The existing shape is replaced, and the text in the shape is not removed or changed.

Exercise

Exercise File: Tourism9-10.pptx

Exercise: If necessary, navigate to Slide 8 and select the SmartArt graphic.

Insert an oval shape below the third shape in the graphic.

Delete the oval shape.

Add Shape button

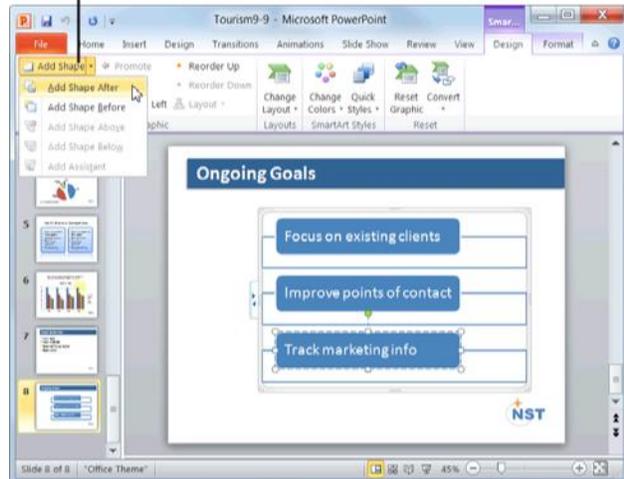


Figure 9-16: Adding a shape to a SmartArt graphic.

Change Shape button

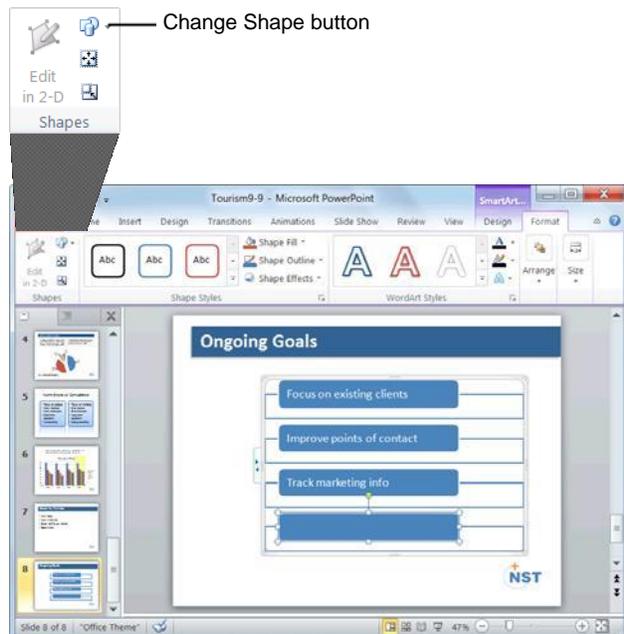


Figure 9-17: Replacing a shape with a different one.

Remove a shape

It's easy to remove a shape if you don't want it in the SmartArt graphic any longer.

Select the shape you want to remove.

Press the <Delete> key.

The shape is removed from the SmartArt graphic.

Other Ways to Remove a Shape:

Remove the bullet in the Text pane of the SmartArt graphic.

Tips

To resize a shape, click and drag one of its sizing handles.

To move a shape, simply click and drag the shape to a new location on the slide. However, the automatic spacing is not applied when you move shapes.

Mustafa H. Ali

Formatting SmartArt

PowerPoint 2010 has a variety of SmartArt layouts and styles that allow you to format your SmartArt graphics with the click of a button.

Change layouts

If you find that the layout you selected isn't the best fit for your data, you can easily switch to a different layout.

Select the SmartArt graphic.

Click the **Design** tab on the Ribbon under SmartArt Tools.

Select a layout from the Layouts group.

The selected layout is applied.

Tip: To view more layouts, click the **More** button () in the Layouts group; click **More Layouts** to display the SmartArt Graphic dialog box.

Other Ways to Change Layouts: Right-click the SmartArt graphic and select **Change Layout** from the contextual menu. Select a new layout and click **OK**.

Change colors

If you don't like the color that has been assigned to your SmartArt graphic by default, change it.

Select the SmartArt graphic.

Click the **Design** tab on the Ribbon under SmartArt Tools.

Click the **Change Colors** button in the SmartArt Styles group.

The Color Gallery appears.

Select the color variation that you want to use.

PowerPoint updates the SmartArt graphic to reflect your changes.

Exercise

Exercise File: Tourism9-11.pptx

Exercise: If necessary, navigate to Slide 8 and select the SmartArt graphic.

Change the style of the graphic to the Polished 3-D style, and then reset the graphic to its original style.

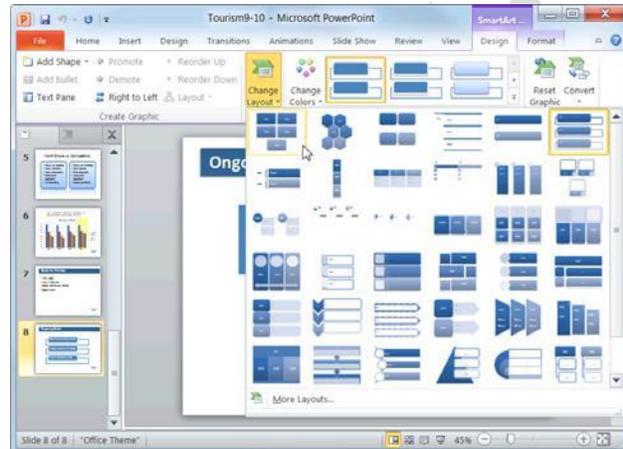


Figure 9-18: Changing the layout of a SmartArt graphic.



Figure 9-19: Several different color styles are available.

Change styles

Changing the visual style of a SmartArt graphic is an easy way to spice up its appearance. A visual style is a set of different formatting commands that can be applied to the graphic in one single step.

Select the SmartArt graphic.

Click the **Design** tab on the Ribbon under SmartArt Tools.

Select a style from the SmartArt Styles group. The selected style is applied.

 **Tip:** To view all the available styles, click the **More** button (⌵) in the Chart Styles group to display the Chart Styles gallery.

Discard all formatting changes

Sometimes you might find yourself wanting to start all over with a SmartArt graphic. When this happens, you can easily restore the default formatting of the graphic using the Reset Graphic command.

Select the SmartArt graphic and click the **Design** tab on the Ribbon under SmartArt Tools.

Click the **Reset Graphic** button in the Reset group.

The graphic is restored to its original state.

 **Tip:** To restore defaults for only one shape, right-click the shape and select **Reset Shape** from the contextual menu.

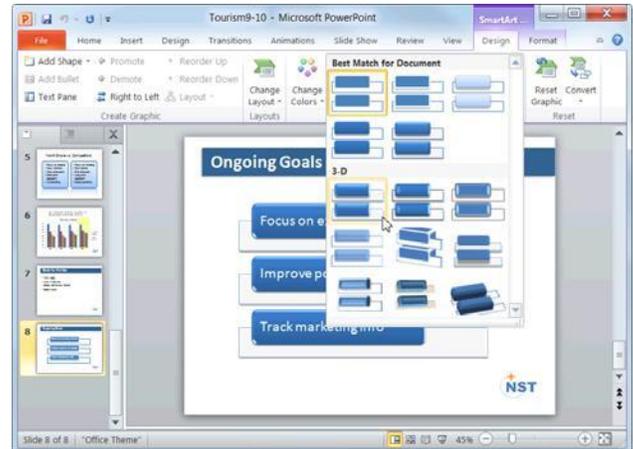


Figure 9-20: Click the More button to view all of the Chart Styles.

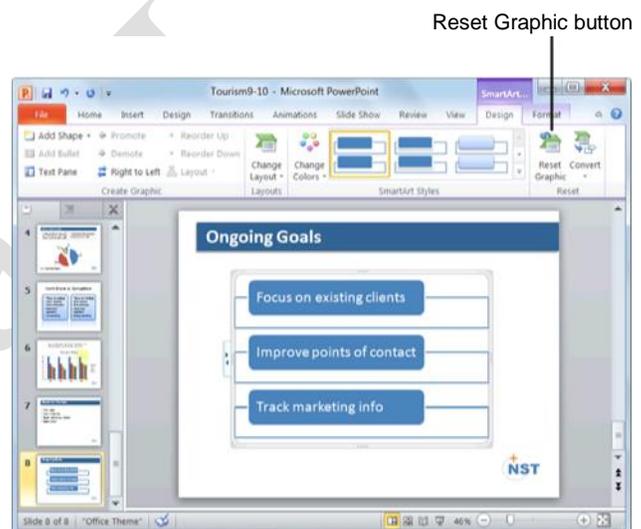


Figure 9-21: Use the Reset Graphic button to restore the formatting of the graphic to its original settings.

Converting Slide Text into SmartArt

Presentations often contain slides with bulleted lists. In PowerPoint 2010, you can convert the text in a bulleted list into a SmartArt graphic that illustrates your message visually.

Select the placeholder that contains the text you want to convert.

Click the **Home** tab on the Ribbon and click the **Convert to SmartArt** button in the Paragraph group.

A gallery appears, displaying the SmartArt layouts that work best with bulleted lists.

Tip: To view the entire gallery of SmartArt layouts, click **More SmartArt Graphics**.

Select a layout from the gallery.

The selected text is transformed into a SmartArt graphic.

Trap: Some text customizations—such as font color and size—will be lost during the conversion process. But don't worry; you can reformat the text in the graphic to meet your needs.

Other Ways to Convert to SmartArt: Right-click the text you want to convert and select **Convert to SmartArt** from the contextual menu.

Exercise

Exercise File: Tourism9-12.pptx

Exercise: Navigate to Slide 7 and convert the bulleted list into the SmartArt graphic of your choice.

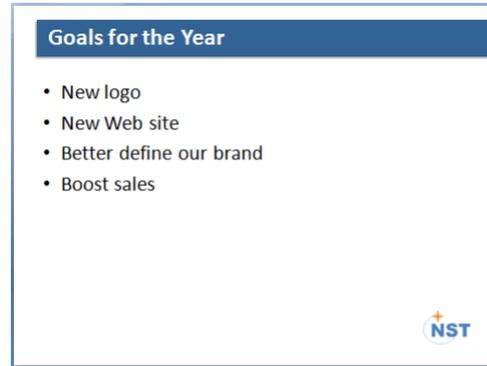


Figure 9-22: A plain bulleted list becomes an exciting diagram when converted into a SmartArt graphic.

Convert to SmartArt button

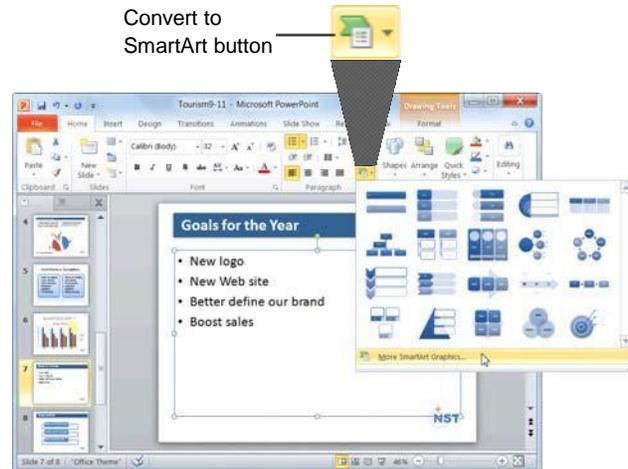


Figure 9-23: Click More SmartArt Graphics to display more options to choose from.