

# CHAPTER 12

## WORKING WITH SMARTART

### In this chapter

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## UNDERSTANDING SMARTART

Some of the coolest improvements in PowerPoint 2007 are related to the overhaul of its diagramming features, which let you add much more than detailed diagrams and organization charts to presentations. Collectively, all the diagrams available in PowerPoint are now called SmartArt.

With SmartArt, you can

- Show all sorts of relationships using diagrams
- Change between SmartArt graphic types so that you can determine which SmartArt variant works best for you
- Change the colors and effects of your SmartArt graphic so that they use the same Theme Colors as your presentation
- Customize the look of the SmartArt graphic further by editing individual shape elements contained within the SmartArt

So why should you want to use SmartArt when you can use just plain bulleted text? There are many advantages to using SmartArt:

- SmartArt lets you visually represent a variety of concepts and ideas that might not work too well with just text.
- SmartArt looks coordinated with your presentation, and you can match it with the look of your presentation.
- You can change your bulleted text to SmartArt with one click.
- You can change between SmartArt variations, and you can also customize an existing SmartArt type. This quick change lets you explore visual options that were never available before.

## ADDING SMARTART TO A PRESENTATION

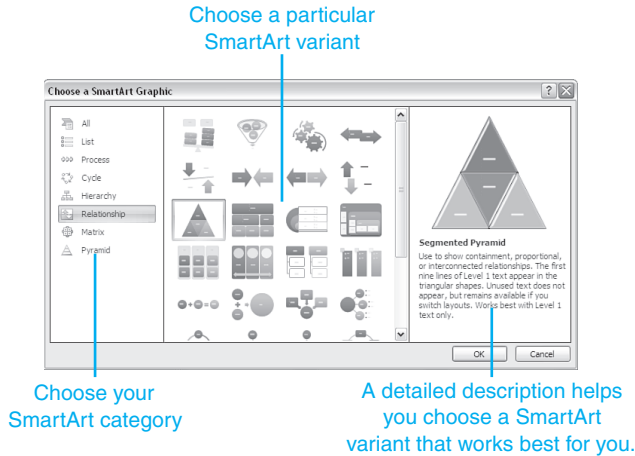
The fastest way to add SmartArt to your presentation is to apply a slide layout that contains a placeholder for SmartArt. To do so, click the down arrow below the New Slide button in the Home tab of the ribbon, and then choose any of the Content layouts from the fly-out Layout Gallery.

→ To learn more about how slide layouts affect your presentation, see “Understanding Slide Layouts” in Chapter 2, “Creating a Basic Presentation,” p. 30.

If you chose any of the layouts that includes a Content placeholder, click the Insert SmartArt Graphic button in the placeholder. The Choose a SmartArt Graphic dialog box opens (see Figure 12.1).

You can also insert SmartArt by clicking the SmartArt button in the Insert tab of the ribbon.

**Figure 12.1**  
The Choose a SmartArt Graphic dialog box gets you started.



## CHOOSING SMARTART

This dialog box has a tri-pane view that makes exploring and choosing your options a quick, three-step affair:

1. Choose any of the SmartArt categories that you want to use. The top category called All lets you explore all SmartArt variants available on your system. Other categories place related SmartArt variants into logical types like Line, Process, Cycle, Hierarchy, Relationship, Matrix, and Pyramid.

You might have more categories available if you install a SmartArt collection from a third-party provider, or if you install something newer that you downloaded from the Microsoft site.

2. The middle pane shows you all the variants available under a particular category. Large thumbnails of each variant make it easy to find exactly what you are looking for. If you don't find something that you need, choose something that is the closest to your requirement, and then refer to the editing options for SmartArt that are covered later in this chapter.
3. The last pane shows you an even larger preview of the selected SmartArt variant along with a very helpful description.

When you have selected the SmartArt variant you want to use, click the OK button to place it on the active slide.

Even if you choose the wrong SmartArt variant, you can change it later.

### TIP

If you already have a text placeholder that uses bullets to identify points, you can convert it to a SmartArt graphic. To do that, just right-click the text placeholder and choose Convert to SmartArt in the ensuing context menu.



**Can't find the right diagram?** See “Expanding Diagram Choices” in the “Troubleshooting” section near the end of this chapter.

## FORMATTING SMARTART

After you place SmartArt on your slide, you need to format it to fulfill your requirements:

- You might want to add or edit text.
- You might want to change the theme colors or apply a style to the shapes.
- You might want to add or remove shapes within the SmartArt.
- You might want to realign or resize the SmartArt.
- You might want to change to another SmartArt variant.

Whatever you might want to do, it's all done from the two new SmartArt Tools ribbon tabs that you can see only when some SmartArt is selected on a slide:

- SmartArt Tools Design ribbon (see Figure 12.2)
- SmartArt Tools Format ribbon (see Figure 12.3)

**Figure 12.2**  
SmartArt Tools Design  
ribbon tab.



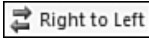










**Figure 12.3**  
SmartArt Tools Format  
ribbon tab.






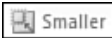
Tables 12.1 and 12.2 explain the functions of the buttons on these ribbon tabs.

**TABLE 12.1 SMARTART TOOLS DESIGN RIBBON BUTTONS**

Button	Name	Description
	Add Shape	Adds another shape to the selected SmartArt graphic.
	Add Bullet	Adds a bullet at the same level as the selected text.
	Right to Left	Changes the direction of the chosen element such as an arrow from right to left. This is a toggle option.


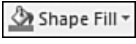
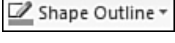
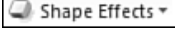



Button	Name	Description
 Layout ▾	Layout	Enables you to change the hierarchy level of the selected SmartArt component.
 Promote	Promote	Promotes the level of the selected SmartArt component.
 Demote	Demote	Demotes the level of the selected SmartArt component.
 Text Pane	Text Pane	Makes the text pane visible so that you can also edit the SmartArt text as bullet points. This is a toggle option.
	Layouts	Shows more layouts in the same SmartArt type—so if you have an organization chart on the slide, this shows you more SmartArt layouts for organization charts.
 Change Colors	Change Colors	Lets you change the color combination of the elements contained in the SmartArt graphic.
	SmartArt Styles	Provides more styles of the selected SmartArt graphic, with changed colors and effects.
 Reset Graphic	Reset Graphic	Resets the graphic to the original SmartArt graphic, which is helpful if you have resized elements.

**TABLE 12.2 SMARTART TOOLS FORMAT RIBBON BUTTONS**

Button	Name	Description
 Edit in 2-D	Edit in 2-D	Works for SmartArt elements with 3-D effects that you might find easier to edit in 2-D.
 Change Shape ▾	Change Shape	Enables you to change the shape of a selected SmartArt element; for example, you can change an arrow to a rectangle.
 Larger	Larger	Makes the selected SmartArt element larger.
 Smaller	Smaller	Makes the selected SmartArt element smaller.

*continues*

TABLE 12.2 CONTINUED

Button	Name	Description
	Shape Styles	Applies ready-formatted styles to selected SmartArt elements.
	Shape Fill	Changes, adds, or removes the shape fill of a selected SmartArt element.
	Shape Outline	Changes, adds, or removes the shape outline of a selected SmartArt element.
	Shape Effects	Changes, adds, or removes effects applied to a selected SmartArt element.
	WordArt Styles	Applies a WordArt style to the text contained in a selected SmartArt element. Also enables you to change the fill, outline, and effects.
	Arrange	Reorders, aligns, groups, and rotates selected SmartArt elements.
	Size	Resizes selected SmartArt elements.

## FORMATTING INDIVIDUAL SMARTART ELEMENTS

After you have placed a SmartArt graphic on a slide, there's a lot you can do to change its appearance:

- Add more shapes—for example, add another shape to a cycle diagram or organization chart.
- Change the colors and effects of the shape elements in a SmartArt graphic.
- Resize and reposition the entire SmartArt graphic, or resize and reposition individual elements such as shapes within the graphic.
- Change the SmartArt graphic variant to something else, or just experiment and see whether another SmartArt graphic variant works better.
- Reorganize the graphic by promoting or demoting levels, changing directions of shapes such as arrows and so on.
- Change individual shape elements within the SmartArt graphic, or make them smaller or larger.
- Change the font formatting of the text within the SmartArt graphic.
- Add animation to a SmartArt graphic.

→ To learn more about animation, see Chapter 16, “Working with Animation,” p. 283.

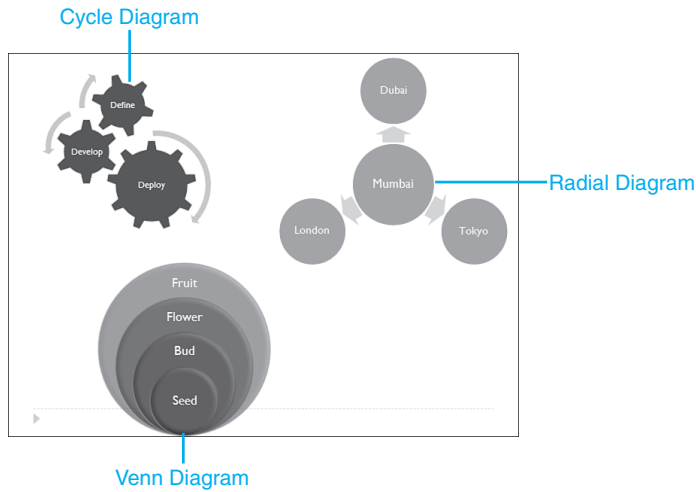
- Reset a SmartArt graphic if you want to start all over again with the formatting.

## SAMPLE SMARTART VARIANTS

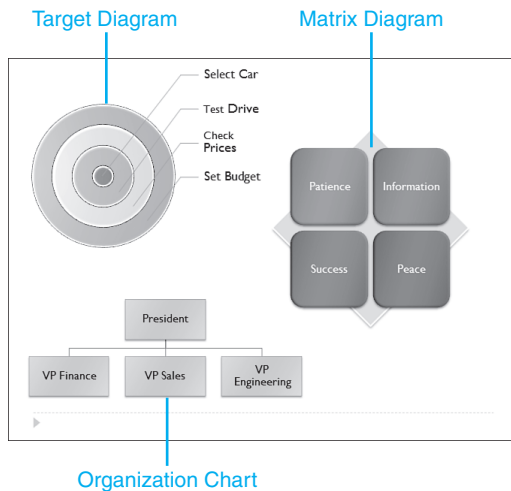
Because there are so many SmartArt graphic variants, it would probably take an entire book to explain them all. However, some variants are more popular than others, and some of these diagram types have been available in previous versions of PowerPoint—so users might be more familiar with them.

Figures 12.4 and 12.5 illustrate examples of some of these SmartArt graphics.

**Figure 12.4**  
There are a variety of ways to illustrate information in PowerPoint.



**Figure 12.5**  
Additional diagram options are also available.



**NOTE**

Remember that SmartArt graphics are only one way to present information visually in PowerPoint. You can also create flowcharts and other illustrations, for example, to convey similar information using PowerPoint's Shapes.

→ To learn how to use Shapes to create flowcharts or other diagrams, see “Inserting Shapes” in Chapter 15, “Working with Shapes and Objects,” p. 260.

## COMMON SMARTART PROCEDURES

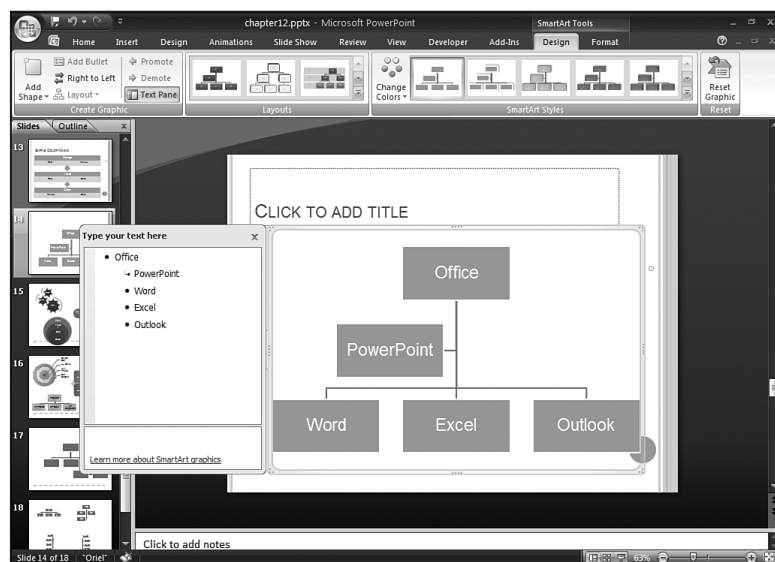
Although different SmartArt variants might look as different as chalk and cheese, they work similarly for several common procedures such as adding text, changing colors, resizing, adding effects, and deleting shape elements or the entire SmartArt graphic. All also have the convenient text pane that makes text editing almost as easy as typing in bulleted text.

### ADDING AND EDITING TEXT IN YOUR SMARTART

You can add or edit the text on the shape elements in all SmartArt graphics by using these procedures:

- Click on the existing placeholder text on the shape element, or start typing if you have a shape without text. Or just select the text in the shape and type to replace the text.
- Type the text in the text pane that you see when you select a SmartArt graphic (see Figure 12.6). If you can't see the text pane, double-click on the SmartArt graphic to activate the SmartArt Tools Design tab of the ribbon and click the Text Pane option. Remember, this is a toggle option.

**Figure 12.6**  
The text pane makes it easy to add or edit text in a SmartArt graphic.



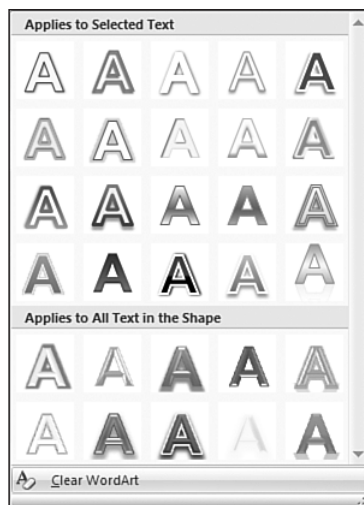
- If you convert a bulleted list to a SmartArt graphic, it already contains text. To convert a bulleted list to a SmartArt graphic, just right-click some selected text in the bulleted text placeholder and choose the Convert to SmartArt option in the resultant context menu.



You can format the text contained inside a SmartArt graphic in several ways, sometimes with different results:

- Select some text, and right-click to summon the mini toolbar that contains font formatting options. In this mini-toolbar, it's easy to apply boldface, a new font, and so on.
- Select some text, and make sure your Home ribbon is active. You can find all the formatting options in the font area. If you want even more options, click the dialog launcher arrow in the Font area to bring up the Font dialog box, which provides more options.
- Double-click your SmartArt to summon the SmartArt Tools tabs in the ribbon, then choose the SmartArt Tools Format tab to make it active. Select your text, and then apply any of the effects found in the WordArt Styles drop-down gallery. Remember, after you apply a WordArt style, your text may not behave like normal text—to convert it back to normal text, select the text again and choose the Clear WordArt option at the bottom of the WordArt Gallery (see Figure 12.7).

**Figure 12.7**  
Apply and clear  
WordArt styles to text  
in a SmartArt graphic.



Even if you chose a SmartArt graphic that doesn't support adding, editing, or formatting text in this manner, you can add text in the form of a text box. To add a text box, click the Text Box button on the Insert tab of the ribbon, click where you want the text box to appear, and type your text.

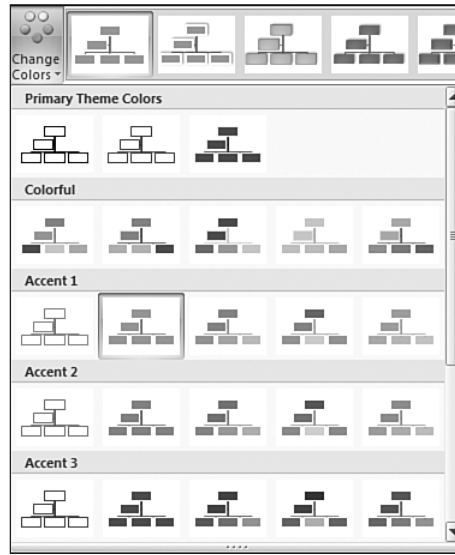
## CHANGING COLORS IN YOUR SMARTART

You can change the colors of your SmartArt graphic quite easily:

1. Double-click on the edge of your SmartArt graphic to bring up the SmartArt Tools tabs in the ribbon.
2. In the SmartArt Tools Design tab, click the Change Colors button to open the Colors gallery that you can see in Figure 12.8.

3. Choose from the color options in any of the categories. PowerPoint shows you a live preview of the option as you hover your mouse over the small previews.
4. To apply one of these options, click the small preview associated with that option.

**Figure 12.8**  
The Color Gallery has small previews that show live results.



## NOTE

If you want to change the colors or another attribute of any individual shape, just right-click and choose the Format Shape option to bring up a dialog box of the same name. This dialog box provides color and fills options that you won't find in the Color gallery. However, do remember that the Color Gallery options are based on color principles and will look good and coordinated all the time. In contrast, the Format Shape dialog box lets you do what you want.

→ For more information about the Format Shape dialog box, see Chapter 15, p. 272.

## RESIZING AND REPOSITIONING YOUR SMARTART

How resizing and repositioning works depends upon what you want to resize:

- The entire SmartArt graphic
- A shape or other element contained in a SmartArt graphic

Fortunately, the process itself works in the same way and is dependent on what you have selected—the entire SmartArt graphic, or just an element contained within the SmartArt.

## RESIZE

To resize, you can

- Select and drag the handles surrounding the selection.
- Double-click the selection to summon the SmartArt Tools tabs in the ribbon. Select the Smart Art Tools Format tab, and click on the Size button so that you can type in figures for an exact size you require.

## REPOSITION

Follow these guidelines to reposition:

- To reposition, you need to select and drag it to a new position.
- If you want to reposition an element within a SmartArt graphic, be aware that you cannot reposition it to an area outside the area of the SmartArt graphic.
- Also, some elements, when repositioned, change more than just their position; they change their relationships to other elements. For example, repositioning a shape in an organization chart might change the hierarchy, as well.

## ADDING EFFECTS

If you have seen the flat diagrams of earlier PowerPoint versions, and wished you could make them look a little more spectacular, then you'll love all the effects that you can apply to SmartArt now.

However, you cannot select the entire SmartArt graphic and apply an effect. The effects you use in PowerPoint are Shape Effects that can only be applied to individual shape elements within a SmartArt graphic.

Follow these steps to apply, change, or remove an effect:

1. Select the shape inside the SmartArt graphic to which you want to apply a Shape Effect. You can also select multiple shapes by Ctrl-clicking, and you might also want to select all the shapes within a SmartArt graphic. You can also select lines such as connectors within a SmartDraw graphic because these are also shapes.
2. Selecting these shapes activates the SmartArt Tools tabs in the ribbon—click the SmartDraw Tools Format tab to make it active.
3. Now you can either open the Shape Styles drop-down gallery and choose a preset effect, or click the Shape Effects button to find a Preset as well as several other sub-menus, which in turn contain even more galleries that let you play with all sorts of effects.

PowerPoint shows you a live preview of all the effects as you hover your cursor over the options. When you like a particular effect, just click to apply it to the selected shapes.

**NOTE**

Remember, you can always click the Undo button on the Quick Access Toolbar to undo your last action.

**DELETING A SMARTART GRAPHIC**

To delete a SmartArt graphic, select it and press the Delete key. If you end up deleting just a part of the SmartArt graphic, and you wanted to delete the entire SmartArt, then select the frame around the SmartArt graphic and press the Delete key again.

The Content placeholder might appear, depending on whether the SmartArt was inserted from a layout or through the SmartArt button on the Insert ribbon.

If you want to create another SmartArt, you can start over from here, accessing the Choose a SmartArt Graphic dialog box by clicking the placeholder or the SmartArt button on the Insert tab of the ribbon.

**WORKING WITH ORGANIZATION CHARTS**

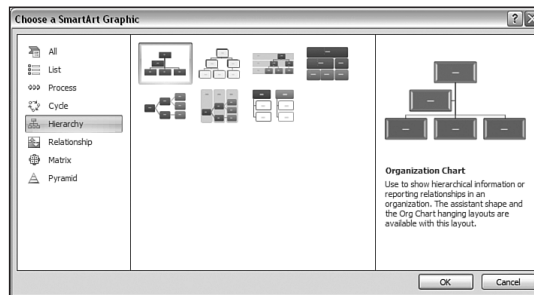
Although an Organization Chart is actually just another SmartArt graphic, it has particular nuances that make it a class apart, and completely different from other SmartArt variants.

Indeed, special applications are available that create only organization charts. You might not need to invest in a specialized application, though, because PowerPoint's implementation of this graphic type is quite complete.

To add an organization chart, choose one of the Organization Charts available in the Hierarchy category of the Choose a SmartArt Graphic dialog box that you can see in Figure 12.9 and click OK.

→ For a refresher on how to open this dialog box, see “Adding SmartArt to a Presentation” earlier in this chapter, p. 206.

**Figure 12.9**  
Choose the Hierarchy category for some Organization Chart samples.

**TIP**

It's best to design your organization chart on paper first, particularly if you're not familiar with this application. This lets you focus on creating the chart rather than on content.

PowerPoint inserts an organization chart SmartArt in to your presentation and activates the SmartArt Tools tabs in the ribbon. Also, the SmartArt Tools Design tab becomes active, and the normally grayed out Layout button in the Create Graphic group of the tab becomes live.

Now that you have placed an organization chart, you'll notice that there's either no text or a text placeholder on all the shapes that invites you to type in some text. You might also want to add more shapes (boxes) to the organization chart and change its layout.

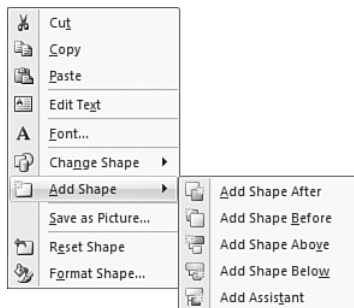
## INSERTING MORE SHAPES

To add more shapes (boxes) to your organization chart, do either of the following:

- Select a shape and click the Add Shape button on the SmartArt Tools Design ribbon.
- Select a shape, right-click, and select the Add Shape option in the resultant context menu.

In either case, you'll see the Add Shape menu that you can see in Figure 12.10.

**Figure 12.10**  
Add a shape to your organization chart.



Unlike previous versions of PowerPoint that made you choose between a sub-ordinate, co-worker, or assistant shape, this version of PowerPoint makes it super simple by providing you with options that don't require you to get very familiar with org-charting terminology. You need to choose from

- Add Shape After
- Add Shape Before
- Add Shape Above
- Add Shape Below
- Add Assistant

You will choose a different option depending on where you want to place a new shape:

- **On the same level:** The first four options add a shape in relation to the position of the selected shape on the right, left, top, or bottom. All these shapes are on the same level.

- **On a lower level:** The Add Assistant option places a shape which is hierarchal lower than the selected shape.
- **On a higher level:** This is not required because every organization chart has at least one shape on the highest level. If you need more shapes on this level, select the highest shape, and add another shape at the same level. However these shapes aren't connected to the original shape.

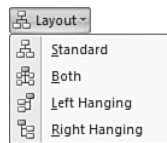
## CHANGING THE LAYOUT

You can change the layout of the assistants (hierarchal, lower shapes) in your organization chart, again in relation to a selected shape within the organization chart.

Follow these steps to change the layout of the assistants:

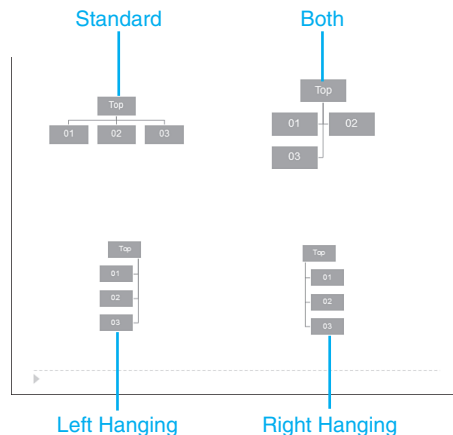
1. Select the shape that is at a level higher than the assistants.
2. In the SmartArt Tools Design tab of the ribbon, click the Layout button to see the menu that you can see in Figure 12.11.

**Figure 12.11**  
Change the layout of the assistants.



3. Choose from the following four options, which are shown in Figure 12.12.
  - Standard—This is the normal, default layout.
  - Both—Distributes the assistants equally in columns and rows.
  - Left Hanging—Distributes all assistants in a left hanging column.
  - Right Hanging—Distributes all assistants in a right hanging column.

**Figure 12.12**  
Sample assistant layouts.



Whichever of these options you choose, all assistants remain linked to the original shape. Figure 12.12 shows you samples of all the four layouts.

### NOTE

To change the level of a selected shape in your organization chart, click the Promote and Demote buttons in the SmartArt Tools Design tab of the ribbon.

## FORMATTING YOUR ORGANIZATION CHART

You can format an organization chart just as you format any other SmartArt graphic. For example, you can reposition it, change its colors, modify line width, and so on. You'll primarily do this by using the options explained earlier in this chapter for other SmartArt graphic variants, or through the Format dialog box (right-click and choose Format Shape from the menu).

- For more information about formatting SmartArt graphics, see "Formatting SmartArt" and "Common SmartArt Procedures," earlier in this chapter, **p. 208** and **212**.
- For more information about the Format dialog box and the Drawing toolbar, see Chapter 15, **p. 272**.



**Is your organization chart is a mess?** See "Fixing a Problem Organization Chart" in the "Troubleshooting" section near the end of this chapter.

You can also animate your organization chart for extra emphasis.

- To learn more about animation in PowerPoint, see Chapter 16, **p. 283**.

### CAUTION

Remember to consider readability and visual clarity when you modify an organization chart's defaults. Some formatting can enhance a chart's appearance, but too much formatting can make it confusing or—worse—unreadable.

## TROUBLESHOOTING

### FIXING A PROBLEM ORGANIZATION CHART

*I tried creating an organization chart for the first time, and it's a real mess. Do I have to delete the entire slide?*

No, just delete the organization chart itself. From there, you can begin again. If you see a Content placeholder, click the Insert SmartArt button. If you see nothing, click the SmartArt button on the Insert tab of the ribbon. In each case, the Choose a SmartArt Graphic dialog box appears.



### EXPANDING DIAGRAM CHOICES

*I can't create the graphic I want with the SmartArt choices.*

Remember that you can apply style options in the Shape Styles and Shape Effects galleries. If those options aren't enough, you can create a diagram yourself from the shapes in the Insert tab of the ribbon. You can also manually design an illustration with PowerPoint's drawing tools. As a last resort, create your diagram in another program (such as Visio, SmartDraw, or Illustrator) and then insert it.

Also, Microsoft has allowed third-party providers to create more SmartArt graphics. In time, this will mean that there will be tons of new SmartArt graphics, and you might even get a particular style created for yourself.