Creating accessible PowerPoint 2010 presentations

This document offers guidance on ways to create Microsoft PowerPoint presentations to make them more accessible to users with disabilities. Because many files are often viewed electronically, governments and industries around the world are implementing policies requiring electronic and information technology to be accessible to people with disabilities. For example, the amended Section 508 of the United States Rehabilitation Act of 1973 requires Federal agencies to make all of their electronic and information technology accessible.

TIP If you have Microsoft Office 2010 or later, you can use a tool for PowerPoint, Word, and Excel called the Accessibility Checker to check your PowerPoint presentations for any issues that might make it challenging for a user with a disability. To learn more, see Accessibility Checker.

Prepare Your Presentation for Your Expected Audience

When you are making a live presentation to a group of people, you need to consider who your audience is.

Before your presentation, you should ask if anyone needs an accessibility accommodation. You may learn that there will be an attendee in the room who is deaf or hard of hearing, possibly needing a sign language interpreter. If there will be attendees with low vision, you may need to prepare handouts with large print, or perhaps send an electronic version of the slides to let people follow along on their laptops. If the room is large, you may need a sound system.

During the presentation:

- If there is a question from the audience, clearly repeat the question before answering it.

• Always speak clearly and at a moderate pace, and face the audience while speaking. These habits help people who are hard of hearing, the sign language interpreter if there is one and everyone else in the audience as well.

Handouts

Make sure your handouts are usable by everyone. Send an electronic copy of your handout in advance. You can also consider large-print handouts for attendees with low vision. Be sure the electronic version follows accessibility rules, so that it can be used by everyone.

Layout

Use one of the standard layout templates when you insert a new slide into PowerPoint. These layouts provide boxes, called placeholders, to insert different types of content, such as the slide title, text, and pictures. Placeholders come preformatted for a range of purposes and help ensure that each slide is as accessible as possible for people using screen readers.

Columns of Text

If you put two or more columns of text on a page, use a standard layout that has two side-by-side text box placeholders. Never use the Tab key to separate lists of text into columns within a single text box. By using text box placeholders, a screen reader will read the entire first text box, and then move to the next text box in the slide's reading order. This will make much more sense to the listener.

Reading Order when Multiple Placeholders Are Used

If there is more than one placeholder on a slide, how do you know the order a screen reader will read the page?

There is a quick way to learn the reading order using the Tab key.

1. Press the **Page Down** key to go to the page you want to check.
2. Press the **Tab** key. A box appears around one of the placeholders indicating the keyboard focus. A screen reader reads the text in this box first.
3. Press **Tab** again to see the next placeholder in the reading order. Continue with this until you move through all of the placeholders on the page. This is the same order that the screen reader will read the page.
4. When you get to the last element on the page, press **Tab** again to cycle back to the first element on the page.

Changing the Reading Order

You can change the reading order by using the **Bring to Front** and **Send to Back** options for each placeholder on the page.

1. Decide what order you want the page to be read.
2. Right click on the box that surrounds the first placeholder in the desired reading order and select the **Bring to Front** option from the context menu.
3. Select the NEXT item you want to be read, right click on that placeholder box, and select **Bring to Front** again.

4. Go through all of the placeholders in the order you want the screen reader to announce the page, selecting **Bring to Front** each time till you get to the last item on the page.
5. When you complete the page, repeat the **Tab** key process to verify that the tab order is correct. Alternately, you can start from the last item on the page and use the **Send to Back** option, going backwards to the first item on the page.

Motion, Blinking, Transitions, and Animations

A common accessibility issue concerns moving or blinking content. Blinking or flashing elements can cause seizures in some people. Do not use any element that flashes, blinks, or has a repetitive motion that repeats faster than 3 times per second. Even people who are not susceptible to seizures are often distracted by these types of content, so it is better to just avoid them altogether.

Slide transitions are effects used to move from one slide to the next, for example, slowly fading away from one slide while the next slide slowly appears. An example of an animation is when you have bullet points appear one at a time on a page, until the entire slide is displayed.

If used sparingly, transition and animation effects can be useful during a live presentation. However, they should be removed if you distribute the presentation as a resource for people to review after the presentation. Screen readers do not work well with transitions, and they can be distracting and confusing for people who are reviewing the presentation.

Add alternative text to images and objects

Alternative text (alt text or Alt Text) appears when you move your pointer over a picture or object, and helps people using screen readers understand the content of images in your presentation. Alt text should be included for any of the following objects in your presentation:
- Pictures
- Clip Art
- Charts
- Tables
- Shapes (that don't contain text and are not in groups)
- SmartArt graphics
- Groups (all objects in this list, with the exception of shapes, should also have alt text when in groups)
- Embedded objects
- Video and audio files

Add alt text by doing the following:
1. Right click the image or object, and then click Format
Note   For tables, click **Table Properties**.
2. Click **Alt Text**
3. Enter a description of the image or object into the **Title** and **Description** text boxes.
Tip   Use clear, but concise descriptions. For example, "a red Ferrari" tells the reader more about the image than "a car."
4. Click **Close**.

Specify column header information in tables

In addition to adding alt text that describes the table, having clear column headings can help provide context and assist navigation of the table's contents.

To specify a header row in your table, do the following:
1. Click anywhere in the table.
2. On the **Table Tools Design** tab, in the **Table Style Options** group, select the **Header Row** check box.
3. Add your header information.

Ensure that all slides have unique titles

Slide titles are used for navigation and selection by people who are not able to view the slide.

To add visible titles to your slides, do the following:
1. On the **Home** tab, in the **Slides** group,
2. Click **Reset** to restore slide placeholders for the selected slide.
3. Type a unique name in the **Title** text box.

If you do not want the title to be visible on your slide, do the following (this will be readable to users of AT):
1. On the **Home** tab, in the **Drawing** group
2. Click the **Arrange** menu
3. Click **Selection Pane**
4. Click the eye icon next to the text box to toggle its visibility

Use hyperlink text that is meaningful

Hyperlink text should provide a clear description of the link destination, rather than only providing the URL.

To add a hyperlink to your document, do the following:
1. Place your cursor where you want the hyperlink
2. On the **Insert** tab, in the **Links** group
3. Click **Hyperlink** to open the Hyperlink dialog box
4. In the **Text to display** box, type in the name or phrase that will briefly describe the link destination
5. In the **Address** box, type the link URL
6. Click **OK**

To change the text of a hyperlink, do the following:
1. Select the link and then, on the **Insert** tab in the **Links** group
2. Click **Hyperlink** to open the hyperlink dialog box
3. In the **Text to display** box, make any necessary changes to the text
4. Click **OK**

ScreenTip text :

Additionally, you can include ScreenTip text that appears when your cursor hovers over a hyperlink, and can be used in a similar way to alt text.

1. Place your cursor in the hyperlink you want to add ScreenTip text to
2. On the **Insert** tab, in the **Links** group, click **Hyperlink** to open the hyperlink dialog box
3. Click **ScreenTip**
4. Type in your text in the **ScreenTip** text box
5. Click **OK**

Use simple table structure

By not using nested tables, or merged or split cells inside of data tables, the data is predictable and easy to navigate.

To test and simplify the table structure, do the following:
1. Select the first cell of the table
2. Press the **Tab** key repeatedly to make sure that the focus moves across the row and then down to the first cell of the next row

Avoid using blank cells for formatting:

Using blank cells to format your table could mislead someone using a screen reader to believe that there is nothing more in the table. You can fix this by deleting unnecessary blank cells or, if your table is used specifically to layout content within your presentation, you can clear all table styles by doing the following:
1. Select the entire table
2. On the **Table Tools Design** tab, in the **Table Styles** group
3. Click the **arrow** next to the style gallery to expand the gallery of table styles
4. On the menu below the gallery, click **Clear**.

Include closed captions for any audio or video

Whenever you use additional audio or video components in a presentation, ensure that the content is available in alternative formats for users with disabilities, such as closed captions, transcripts or alt text.

If you're using PowerPoint 2010, you can download and install the Sub-titling text add-in for Microsoft PowerPoint (STAMP), which lets you easily create closed captions for video and audio in your presentations.

Ensure that the reading order of each slide is logical

People who cannot view the slide will hear slide text, shapes and content read back in a specific order. If you are using objects that are not part of the slide template, it is important to be sure that they will be read by a screen reader in the order that you intend them to be.

To check the order in which your slide content will be read back, do the following:
1. On the **Home** tab, in the **Drawing** group
2. Click **Arrange** and then choose **Selection Pane**

The **Selection Pane** lists the objects on the slide. Objects will be read back beginning with the bottom list item and ending with the top list item. Correct any out of order items using the Re-order arrows on the bottom of the pane.

Increase visibility for colorblind viewers

Colorblindness affects a significant number of people, most often as an inability to distinguish between red and green, or seeing red and green differently. When creating presentations, it's important to choose elements that increase visual contrast so viewers who cannot rely on color distinction can still understand what they're seeing.

Some things you can do when building a slide deck include:
- Avoid using orange, red, and green in your template and text.
- Use texture in graphs, instead of color, to highlight points of interest.
- Circle or use animation to highlight information, rather than relying on laser pointers or color.
- Keep the overall contrast in your presentation high.

To get an idea of how a person who is colorblind will see your presentation, you can check the contrast by doing the following:
1. On the **View** tab, in the **Color/Grayscale** group
2. Click **Grayscale**.
3. PowerPoint Ribbon **View** tab, **Grayscale** selected
4. On the **Grayscale** tab
5. Click **Grayscale** to see what slides look like when flattened to just their level of contrast
6. PowerPoint **Grayscale** tab with **Grayscale** selected

Accessibility Checker

Like the spelling checker tells you about possible spelling errors, Accessibility Checker in Word, Excel, and PowerPoint tells you about possible accessibility issues in your Office file so you can fix these issues so someone with a disability can read and get to your content.

Use the Accessibility Checker:
1. Click **File**
2. Click **Info**
3. Click **Check for Issues** button
4. Click **Check for Accessibility**