

# What's New in Excel 2007?

## Introduction

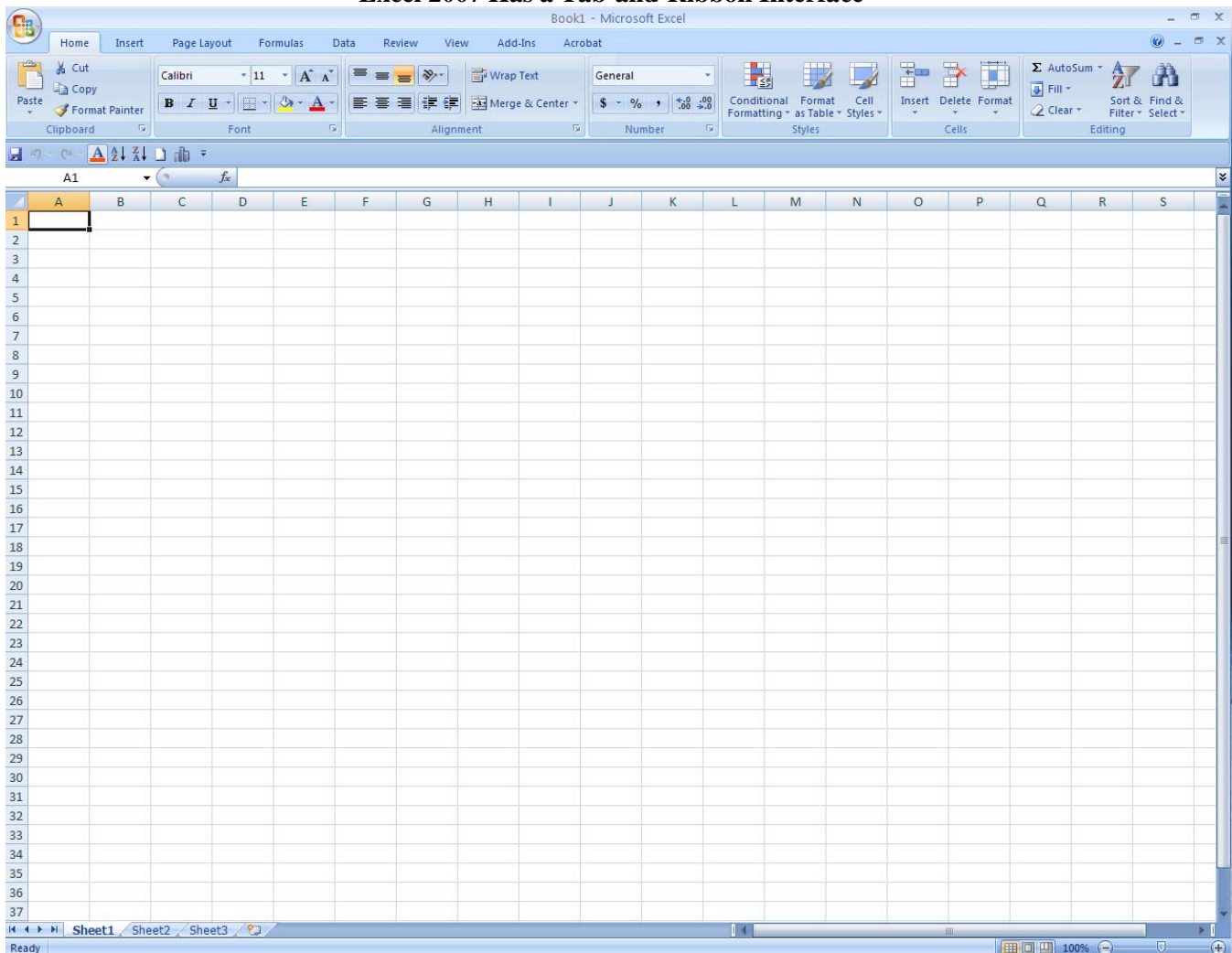
Those institutional researchers who have been working in Excel for many years have noticed relatively few changes between past versions, making the upgrade from Excel 1998 through 2003 a relative breeze. As you may have heard (or are now experiencing), there are many changes to the 2007 version. This lunchtime roundtable discussion will provide users who have recently upgraded an opportunity to share ideas about the new features, talk about solutions for features that have been removed, and provide those still using Excel 2003 a glimpse as to what's ahead. We will provide a short list of the most important changes so users will be up and running soon after conversion. Resources available on the web and other ideas to help the conversion process will also be discussed.

## Major changes

Two significant differences between Excel 2003 and Excel 2007 are:

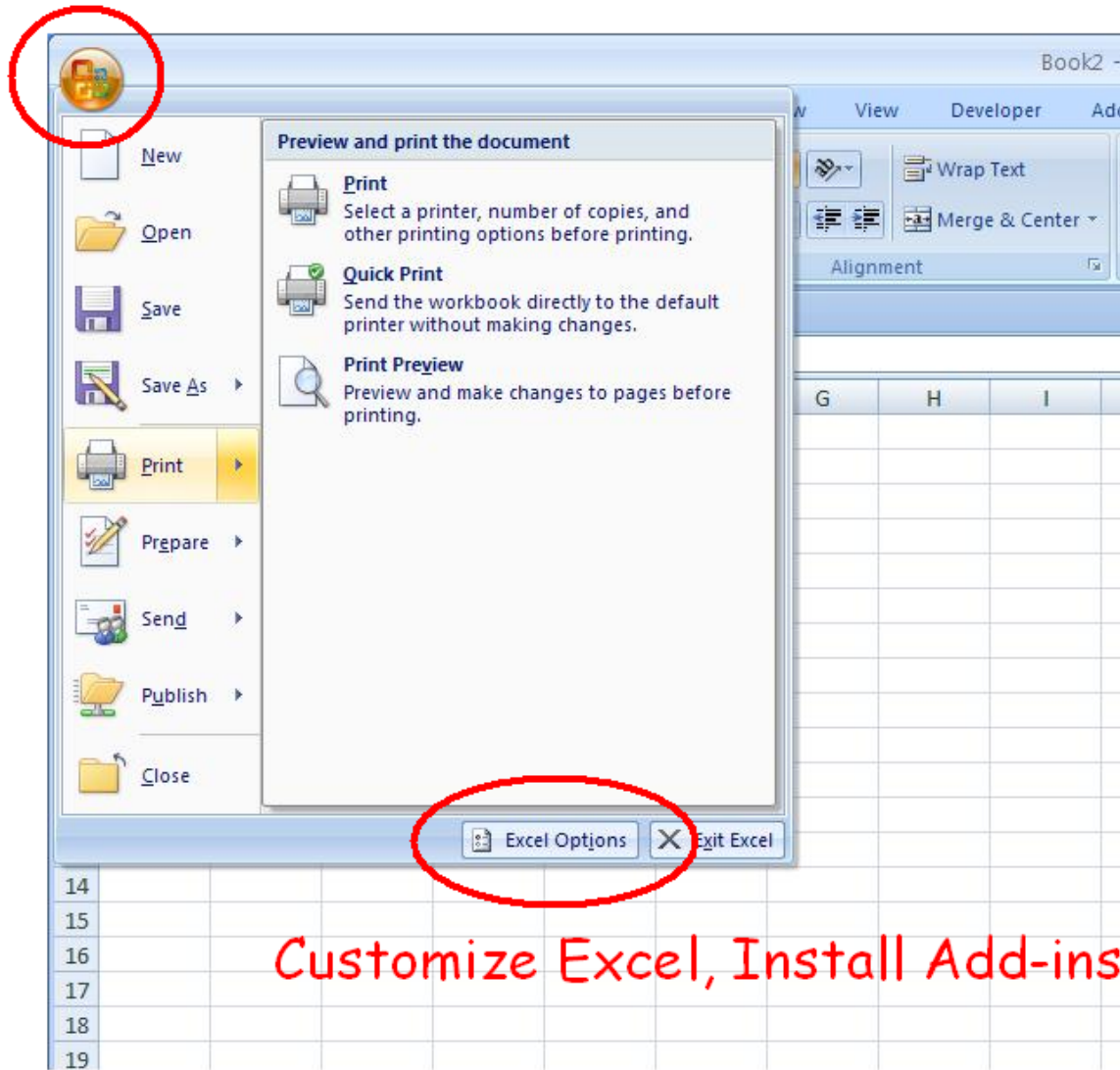
- The interface changes from menu-and-toolbar to tab-and-ribbon
- The file extensions and supported file formats have changed

### Excel 2007 Has a Tab-and-Ribbon Interface



Many Options are “Hidden” in the Office Button

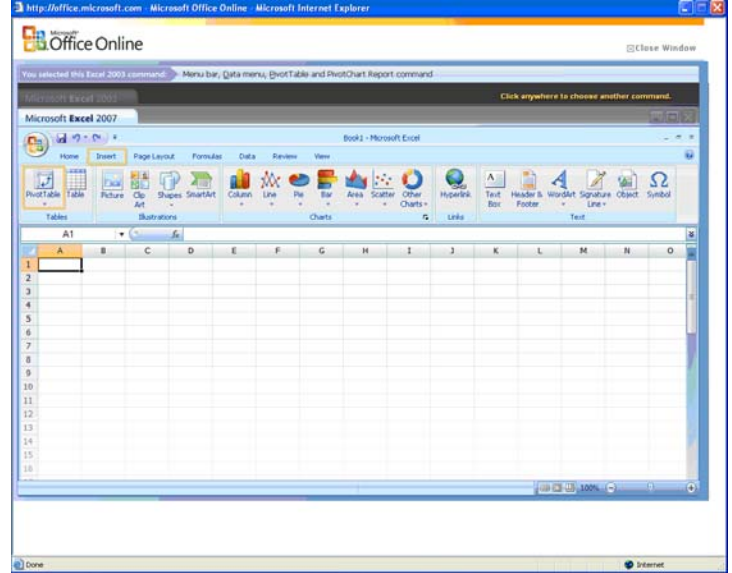
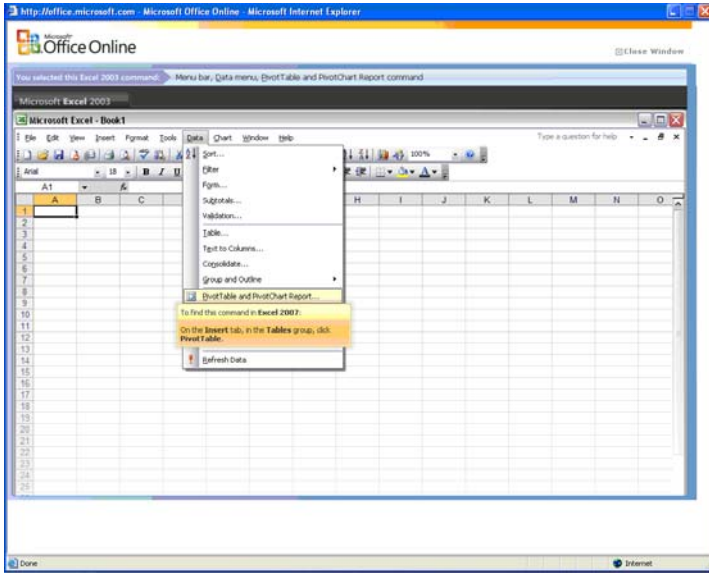
## Office Button



Customize Excel, Install Add-ins

To help users find the toolbar they are used to, Microsoft provides an interactive tool on its website:  
<http://office.microsoft.com/en-us/excel/HA101491511033.aspx>

Click on the interactive tool as if using Excel 2003,  
and the interactive tool guides you to the right place in Excel 2007



**List of Excel File Extensions  
(From [www.wikipedia.com](http://www.wikipedia.com))**

Excel File Extentions	Extension Meanings
xlsx	Excel 2007 XML Workbook
xlsm	Excel 2007 XML Macro-Enabled Workbook
xltx	Excel 2007 XML Template
xltm	Excel 2007 XML Macro-Enabled Template
xlsb	Excel 2007 binary workbook (BIFF12)
xlam	Excel 2007 XML Macro-Enabled Add-In

**Enhanced features**

**Enhanced storage capacities make the exchange and manipulation of mass data faster**

According to [www.Microsoft.com](http://www.Microsoft.com) and Office Excel 2007 Bible by John Walkenbach, the enhanced features for Excel 2007 are as the follows:

**By the Numbers: Excel 2003 versus Excel 2007  
(From Excel 2007 Bible by John Walkenbach, page 26)**

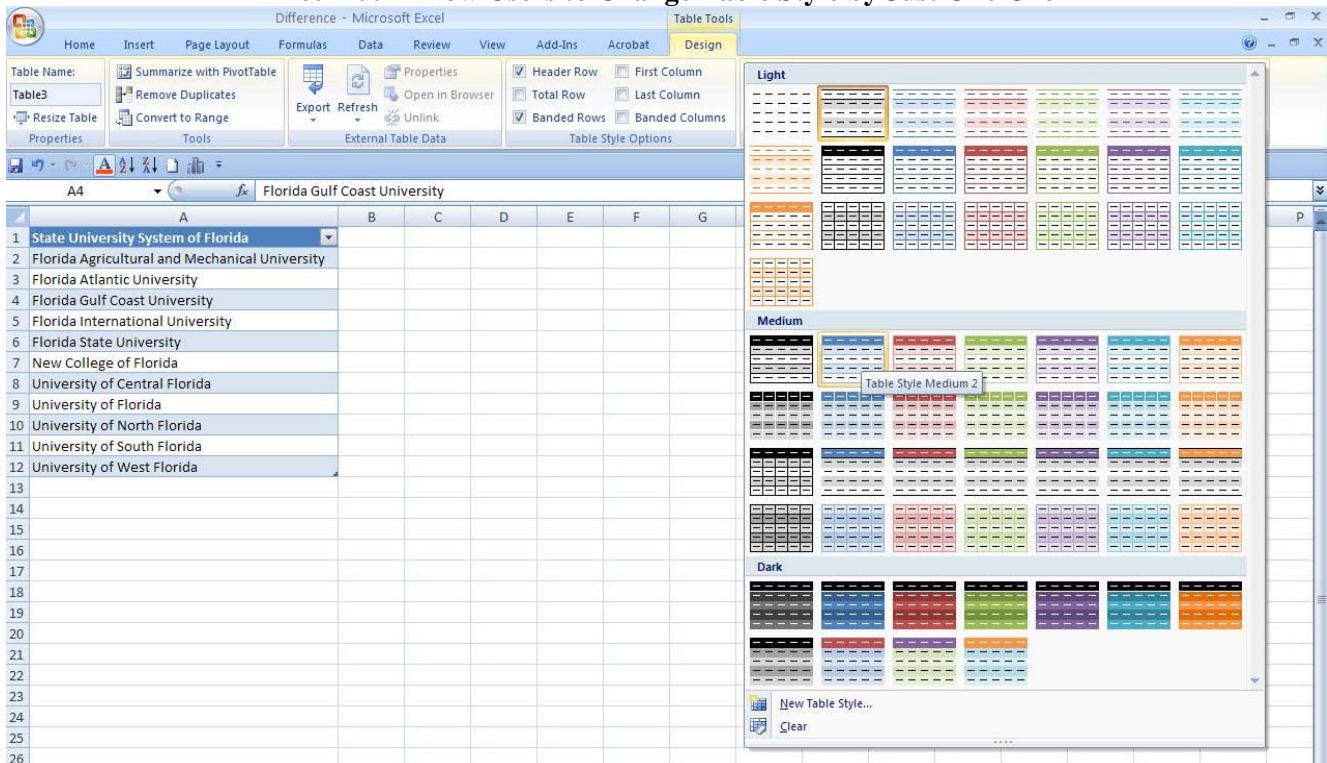
Features	Excel 2003	Excel 2007
Number of rows	65,536	1,048,576
Number of Columns	256	16,384
Amount of memory used	1 Gbytes	Maximum allowed by Windows
Number of colors	56	4.3 billion
Number of conditional formats per cell	3	Unlimited
Number of levels of sorting	3	64
Number of levels of undo	16	100
Number of items shown in the Auto Filter dropdown	1,000	10,000
The total number of characters that can display in a cell	1,000	32,000
Number of unique styles in a workbook	4,000	64,000
Maximum number of characters in a formula	1,000	8,000
Number of levels of nesting in a formula	7	64
Maximum number of function arguments	30	255

- With the number of rows increased to 16 times and number of columns increased to 64 times of Excel 2003, users of Excel 2007 may work with about 17 billion cells in one worksheet
- When an Excel 2007 user shares spreadsheets of more than 65,536 rows with an Excel 2003 user, the Excel 2003 user will lose all the data after the 65,536<sup>th</sup> row; the same rule applies to the column
- Excel 2007 uses multi-core processor platform to make the calculation of formulas faster

### Enhanced table and formula tools make the table building process easier

- Excel 2007 presents appropriate comments when users create tables or write formulas
- Excel 2007 charting engine allows users to build tables by just a few clicks, and change table styles by just one click
- Excel 2007 PivotTables enable users to layout the data quickly, and analyze data from different points of view

### Excel 2007 Allow Users to Change Table Style by Just One Click



### Enhanced visual effect makes it easier to catch data trends in the data cells, tables and graphs

- Excel 2007 contains 4.3 billion colors
- Excel 2007 allows users to add unlimited conditional formatting with new schemes such as color gradients, heated maps, data bars and performance indicator icons
- Excel 2007 table engine adopts rich visual enhancements to its chart, such as 3-D effects, soft shadowing, and transparency

## Deprecated features

A complete list of unsupported features along with detailed explanations is posted on Microsoft's website

<http://office.microsoft.com/en-us/excel/HA101988951033.aspx?pid=CH100648071033>

Unsupported features have different level of changes:

- Some Excel 2003 features are no longer available, and cannot be opened in Excel 2007
- Some Excel 2003 features are no longer available, but can be opened in Excel 2007
- Some Excel 2003 features can be implemented by alternative approaches in Excel 2007

### Unsupported Features: Excel 2003 versus Excel 2007 (From office.microsoft.com)

Category	Features Details
Worksheet Features	AutoFormat
Table features	Excel lists
	Insert row
	Defined names
	Synchronizing Excel tables with SharePoint lists
Formula and function features	Full row or column references
	Defined names in formulas
Charting features	Simultaneous resizing of multiple charts
	Duplicate chart sheets that contain data
	Changing the rotation of 3-D charts
	Using pattern fills in chart elements
	Sizing charts with the window
	Automatically creating a text box when you type on a chart
	Copying charts to Microsoft Office Word 2007 and Microsoft Office PowerPoint 2007
	Using a Word table as a data source
	Printed chart size
	Drag and drop data
	Direct manipulation of data points on charts
	Grouping and selecting shapes
PivotTable Features	Defined names
	Calculated members
	Filtering with SQL Server 2002 Analysis Services
	OLAP Cube Wizard
	PivotTable and PivotChart Wizard
	Custom labels and item formatting
Developer Features	Microsoft Script Edito
File Formats	A list of files can no longer be opened
	Support for Web Page (*.htm; *.html) and Single File Web Page (*.mht; *.mhtml) has changed

**Discussion Examples (The following examples include explanations and suggestions posted on office.microsoft.com):**

Example 1: Using pattern fills in chart elements

- In Excel 2003, users can use pattern fills in chart elements
- In Excel 2007, pattern fills is no longer available, but users can use picture and texture fills
- Charts with pattern fills from Excel 2003 can still be opened in Excel 2007
- Using a picture from an external file may increase the file size, and available textures may not give the same visual effect as texture fills
- This unsupported feature may cause problems when people use black-and-white printers
- A solution could be user created textures as pictures, and use charts with picture fills

**Example 2:** Changing the rotation of 3-D charts, and drag and drop data

- In Excel 2003, both features are available by using the mouse to drag and drop
- In Excel 2007, the mouse can no longer drag and drop the files
- Users need to go through chart options, such as “Format Chart Area” and “Select Data” to make changes on the chart

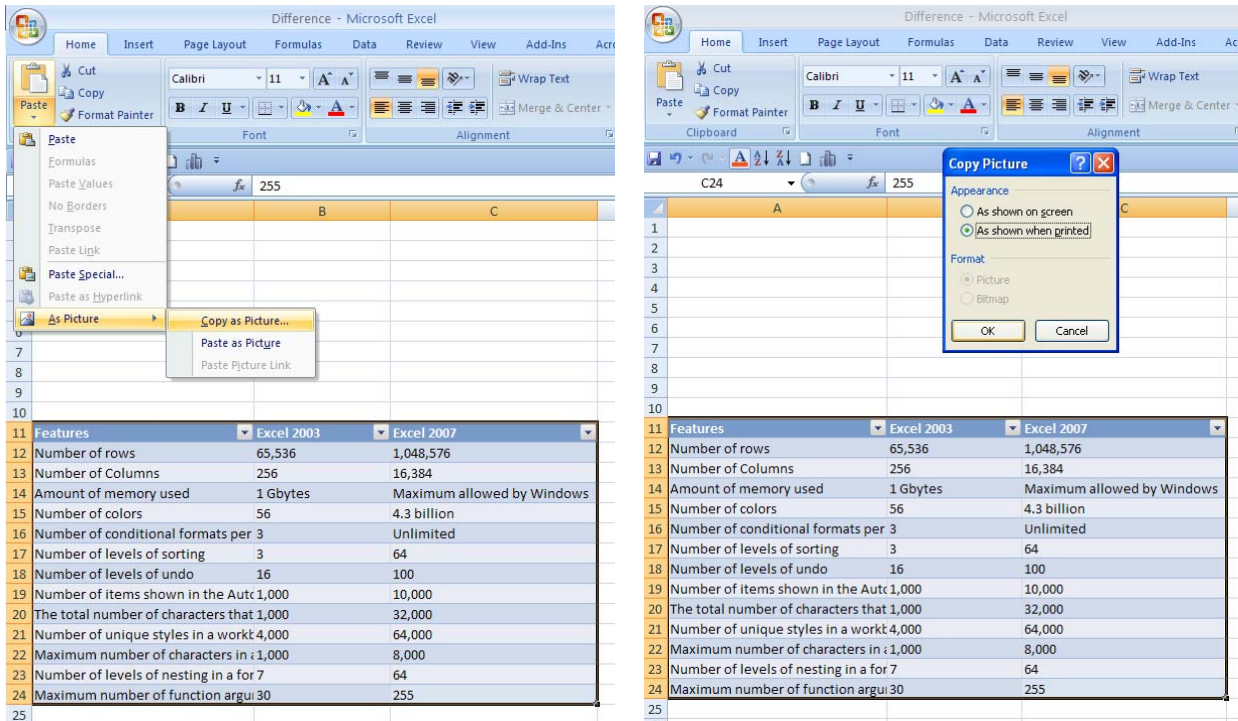
**Example 3:** Automatically creating a text box when you type on a chart

- In Excel 2003, users can create a text box by clicking anywhere on a chart and start typing
- In Excel 2007, click-and-type no longer creates a box
- In practice, we find that if a text box is created in Excel 2003 by clicking and typing, it may not appear on the chart when the same file is opened by Excel 2007
- A solution is to use “Insert Text Box” command in Excel 2007

**Example 4:** Copying charts to Microsoft Office Word 2007 and Microsoft Office PowerPoint 2007

- In Excel 2003, by default, a copied chart from Excel 2003 is pasted as a picture in Word and PowerPoint
- In Excel 2007, by default, a copied chart is pasted in Word and PowerPoint as an object that is linked to Excel chart
- In practice, we find that if a chart or a table is not pasted properly from Excel to Word, the printer may not print the chart or table properly
- A solution is to use the “Paste Options” from Excel

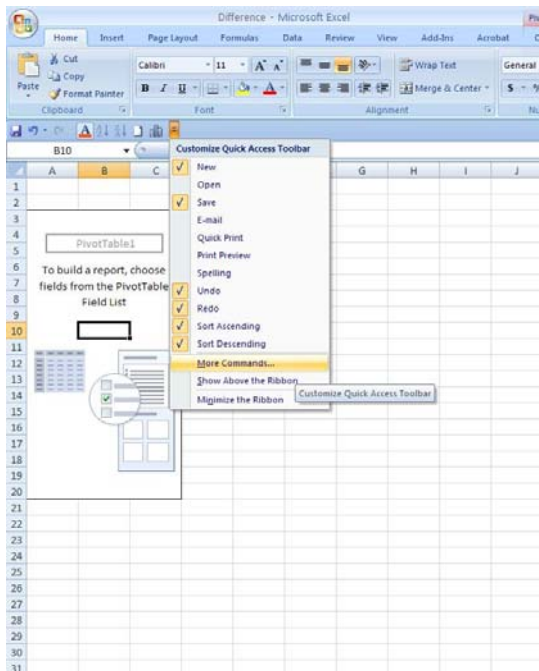
**Example of How to Copy Excel 2007 Table as Graph to Word 2007**



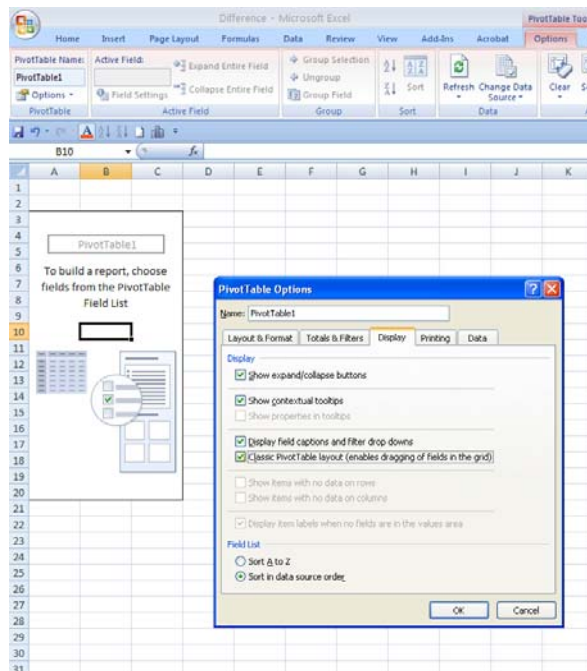
### Example 5: PivotTable and PivotChart

- In Excel 2003, PivotTable/PivotChart Wizard is used to create a PivotTable/PivotChart and arrange data layout
- In Excel 2007, PivotTable/PivotChart Wizard is no longer available on the Ribbon. Users may either use “Insert” tab and “Insert PivotTable” command, or add the “PivotTable and PivotChart Wizard” to the Quick Access Toolbar
- In Excel 2003, by default, users can drag and drop data fields to PivotTable
- In Excel 2007, by default, users use PivotTable Field List to manage data layout. Users can choose the PivotTable option of “Classic PivotTable Layout” to enable dragging of fields in the grid.
- In Excel 2007, multiple consolidation ranges can no longer be built, but user can read the ones built in Excel 2003

### Add Pivot Wizard to Quick Access Toolbar



### Enable Dragging Fields Option with PivotTable



### Additional references

- Excel Help System
- Microsoft website: [support.microsoft.com](http://support.microsoft.com), including interactive tools
- Internet searching engine: [www.google.com](http://www.google.com)
- Online forums: [www.mrexcel.com](http://www.mrexcel.com), [www.excelforum.com/](http://www.excelforum.com/)
- Book: Excel 2007 Bible by John Walkenbach

### Contact information

Helen Fu, Programmer / Systems Analyst, *University of Central Florida*, [helenfu@mail.ucf.edu](mailto:helenfu@mail.ucf.edu)  
Sandra Archer, Director, *University of Central Florida*, [archer@mail.ucf.edu](mailto:archer@mail.ucf.edu)