Advanced Excel 2010

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Tracy S. Leed, MSc, PRSBO

David L. Lawrence Convention Center,
Pittsburgh, Pennsylvania

Payroll & Staff Accountant/System Analyst

Chester County Intermediate Unit #24
Downingtown, PA

Advanced Excel 2010

What's new in Excel 2010 Intro
- **Customizable ribbon**
- **Office Backstage View**
- **Workbook management tools**
- **Sparkline's**
- **Slicers**
- **Paste with Live Preview**
- **New Equation editing tools**
- **Many other enhancements**

TIP See these resources:
What's New in Excel 2010; http://office.microsoft.com/en-us/excel-help/what-s-new-in-excel-2010-HA010369709.aspx?CTT=5&origin=HA101842942#_Toc274394080

Guide to locate favorite menu and toolbar commands in 2010 Ribbon;
http://office.microsoft.com/en-us/outlook-help/learn-where-menu-and-toolbar-commands-are-in-office-2010-and-related-products-HA101794130.aspx#_Toc268688375

Advanced Excel 2010

- **Power user Tips and Tricks**
  - **Master the Data**
  - **It's all about the Data**
- **Data tools to manage the Data**
  - **Transform the Data**
- **Automate - adopt Developer skills**

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Power user Tips & Tricks

- **Quick Access Tool bar and Ribbon - customize**

    The ribbon new to Excel 2007 allowed users to Customize quick access toolbar
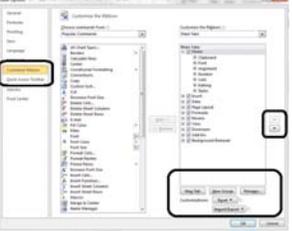
New to Excel 2010 customize Ribbon

    Create custom tabs and groups and rename or change the order of the built-in tabs and groups.

TIP You can also get to the Customize the Ribbon window, by right-clicking any tab on the ribbon, and then clicking Customize the Ribbon.

Advanced Excel 2010
Power user Tips & Tricks

Excel 2010 customize Ribbon File tab\Help\Options\Click Customize Ribbon

Customize options

New Tab

New Group

Rename

Import/Export

Rearrange with up and down arrows

TIP See this resource

Video: How to customize the Ribbon;
http://office.microsoft.com/en-us/excel-help/video-customize-the-ribbon-HA101850352.aspx?CTT=5&origin=HA010355697

Advanced Excel 2010
Power user Tips & Tricks

Templates - save time and add consistency to your excel documents
File Tab\New
templates grouped by categories

A powerful dashboard template is one of the many options available

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Power user Tips & Tricks

➡ *Status Bar* - get more information
Customize the status bar - right-click status bar

➡ *Freeze* and *unfreeze* **worksheet titles -** view titles while scrolling
through large data sets
View tab\ Freeze Panes (Unfreeze Panes)
Excel displays dark lines to indicate frozen elements.

➡ *Split* and *Un-split* **Worksheet windows** *a* toggle command,
allows users to scroll and view sections of large data sets.
View tab\Split – toggle on and off.

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Power user Tips and Tricks

➡ *View Side by Side*
Line up Multiple Sheets in the same Worksheet in same window
View tab\New Window\View Side by Side
*By default, Synchronous Scrolling option is turned on, so that you can scroll
through both pages by dragging the slider bar in one of them.*
*Turn off Synchronous Scrolling if you prefer to scroll through each sheet
separately.*

➡ *Magnification* - Zoom slider allows user to view more data on the screen. Click Zoom
slider bar to desired magnification
To focus on specific group of cells or data, select data set, than
slide Zoom Slider
Zoom dialog box; allows user to define zoom ration

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Power user Tips and Tricks

➡ *Keyboard shortcuts* – adding a few of these can be a huge time saver
CTRL key shortcuts
ALT key shortcuts – and Hot Keys for editing commands
Press ALT key - KeyTips displayed over each feature that is available in the current view.
*My new favorite* **ALT =** =SUM() function
KeyTips

CNTL-[: - **CTNL** than keys – **[** at the same time-
highlights the Formulas that -Reference the Current Cell Excel 2010 Keyboard shortcuts
Function keys- F1-F12
➡ *F1*= help; *F7* spelling; *F9* calculate; *F10* KeyTips; *F11* create chart current cell range; *F12*
Save As

TIP See these resources:
Excel 2010 Keyboard Shortcuts including PDF Quick Reference Cards; http://office.microsoft.com/en-us/excel-help/keyboard-shortcuts-in-excel-2010-HP010342494.aspx#BM3http://office.microsoft.com/en-us/excel-help/keyboard-shortcuts-in-excel-2010-HP010342494.aspx#BM3
Excel 2010 keyboard shortcuts II: ALT key Course & Quick Reference Card; http://office.microsoft.com/en-us/excel-help/excel-2010-keyboard-shortcuts-ii-alt-key-shortcuts-RZ102733786.aspx
Excel 2010 ALT hot keys for editing commands;
http://www.dummies.com/how-to/content/hot-keys-for-excel-2010-editing-commands.html

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Power user Tips and Tricks

New Backstage view & File Tab - Where you do things to the file which you don't do in the file

Replaces File menu or Office button in earlier versions

Contains common tasks related to files
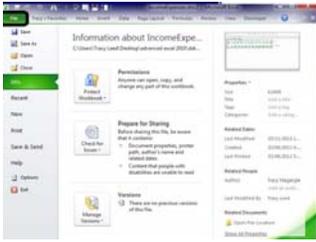
The Office Backstage view is where you manage your files and the data about them — creating, saving, inspecting for hidden metadata or personal information, and setting options.

Backstage view – simplified printing (Ctrl+P)- preview, change settings, and print all with a live preview

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Power user Tips and Tricks

Excel 2010 Security – Protect your files

Protected view and more!

Security Message Bars provide the opportunity to consider the potential security risks that may be in your file, and then the ability to open or read the file while reducing the risks that can occur.

Use the *Trust Center* to view security settings or to change them. *File Tab/Help- Options/Trust center*

Understand the reasons for *Protected View* and how to enable editing when it appears.

TIP See this resource
Quick Reference Card: Office 2010 Security Protecting your files;
http://office.microsoft.com/en-us/word-help/quick-reference-card-RZ101665538.aspx?section=10&mode=print

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Advanced Excel 2010

Master the data

Format and edit - Home Tab

Transpose – rearrange data in rows and columns

Home tab\Clipboard\Copy\Paste\Transpose

Conditional formatting – visual clues to data

Home tab\Styles\Conditional Formatting

Format as Table – quickly manage group of related data independently from data in other rows and columns.

Home tab\Styles\Format as Table

Cell Styles- quick and easy style changes to cells – more than 40 colorful predefined styles available

Home tab\Styles\Cell Styles

Advanced Excel 2010

Master the data

Visually denote the data- Insert Tab

In Excel 2010 Chart wizard retired!

➡ ***Charts > Insert tab*** = direct access to all major types of charts

➡ ***Pivot table*** **and** ***Table*** **option** – use to quickly arrange, summarize, manage, and analyze the data

➡ ***Slicer*** – filter large data sets in more detail

➡ ***Grouping*** – outline and summarize data up to eight levels.

Advanced Excel 2010

Master the data

- ***Visually denote the data- Insert Tab***

➡ ***Charts*** – display data visually

Understand the parts of an excel chart to harness the power of the visualization.

The guts: Chart area, data marker, data series, axis, tick mark, plot area, gridlines, chart text, and legend.

TIP See this resource:

Get to know the Parts of and Excel 2010 Chart: http://www.dummies.com/how-to/content/getting-to-know-the-parts-of-an-excel-2010-chart.seriesId-223717.html

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Advanced Excel 2010

Master the data

➡ ***Sparkline's*** – visualize data trends with one click

How to use Sparkline's to show data trends

TIP

How to use Sparkline's to show data trends;   http://office.microsoft.com/en-us/excel-help/use-sparklines-to-show-data-trends-HA010354892.aspx

➡ ***Hyperlinks*** – embed links to documents, email addresses, picture, or website directly on worksheet.

Embed hyperlinks within a worksheet

The Essentials of Working with Excel 2010 Charts - For Dummies

➡ ***Screenshot tool*** - instantly insert picture of any program that is running and is not minimized. Use screen clipping to insert a part of the screen picture.

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It's all about the Data

Data tab – get connected

Get external data – eliminate time consuming copy and paste

Import data from a variety of sources with a few simple clicks

After connection you can auto refresh data from its original source, manage and change connections and their properties.

TIP

Connect to external Data Excel 2010;
http://office.microsoft.com/en-us/excel-help/connect-to-import-external-data-HP010342297.aspx

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It's all about the Data

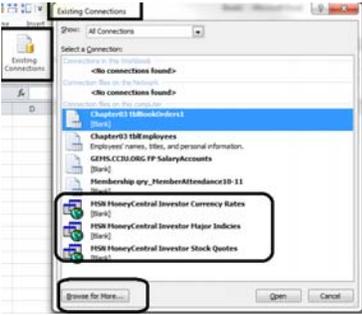*Connect data (import data) from text files*

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It's all about the Data – get connected

Existing Connections

Data refreshed with saved connection options

MSN Money defaults

Use data connections for data files, databases, and other data sources including the Web.
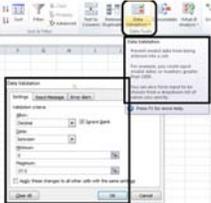

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Data tools to manage the data

Data Tab – empower yourself

➡ ***Sort & Filter*** - Specify the data you want to see with- you are the master over the data

➡ ***Data validation*** - control type of data entered into cells; Data tab\data validation.
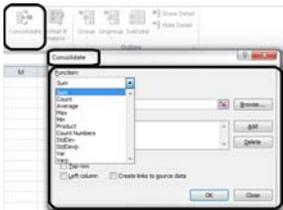

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Data tools to manage the data
Data Tab – empower yourself over the data

➡ ***Consolidate*** - summarize and report values from multiple worksheets or workbooks into one NEW range/worksheet.
   Two main techniques: by position; by category
   Data Tab/Consolidate

Various functions available

Let's try!

TIPS Consolidate data from multiple worksheets in a single worksheet
   Video: Consolidate Excel Data from multiple workbooks

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Data tools to manage the data

Data Tab – empower yourself

➡ ***What –If Analysis:*** -test values for the formulas in the sheet
   ***Scenario Manager*-** Create and save various
      scenarios and switch between them
   ***Goal Seek*-** find a desired value for a formula-
   Data tables -see results of varied possible inputs.

TIPS
Intro to What- if analysis; http://office.microsoft.com/en-us/excel-help/introduction-to-what-if-analysis-HA010243164.aspx

Video: What-if analysis example; http://www.youtube.com/watch?v=ZyehZAbj9Iw

Compare Budgets with Scenarios;
http://blog.contextures.com/archives/2009/12/16/compare-budgets-with-excel-scenarios/

Video: What-If / Data Tables; http://www.youtube.com/watch?v=eSRr3g6ptYY
Let's Try it!

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Data tools to manage the data

Data Tab – empower yourself

Group and Subtotal - *Outline the data up to 8 levels*

Group *or relate a range of cells so they can be collapsed and expanded.*

Subtotal *total rows of related data together by automatically adding subtotals and totals for cells selected.*

Use an outline to quickly display summary rows or columns, or to reveal the detail data for each group

How to outline (group) data in a worksheet ;
TIP *http://office.microsoft.com/en-us/excel-help/outline-group-data-in-a-worksheet-HA010342744.aspx*

- Try it!

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Transform the data !

The Formula tab – take action

Function Library

Functions – arranged by categories

Defined names – group data ranges for use in formulas

Formula Auditing -powerful tools to manage formulas

Trace Precedents/dependents/remove arrows
Show Formula – a hidden GEM
Error Checking
Evaluate Formula
Watch Window
Calculation Options

Advanced Excel 2010

Transform the data !

The Formula tab – take action

Insert Function- fx

TIP Use Insert Function option on the Formula tab to open dialog box.

For help with functions – highlight function in blue and select "Help on the function" option bottom of screen

Advanced Excel 2010

Transform the data !

The Formula tab – take action

Function Library

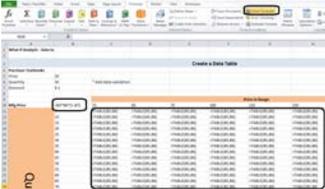*Defined names* - simplify data ranges for use in formulas
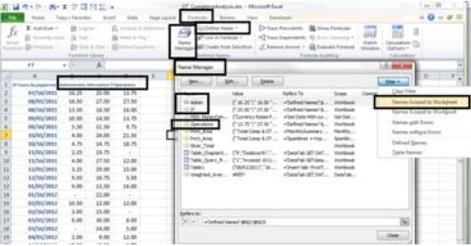
Ex, 3 names for Admin, IT, Operations created, review in name manager, use filter to assist with viewing defined names.!

Advanced Excel 2010

Transform the data ! Formula Tab

Show Formulas – powerful feature which auto displays all functions

HIDDEN GEM

Calculate Options – specify when functions are calculated, default is recalculate when formula change made
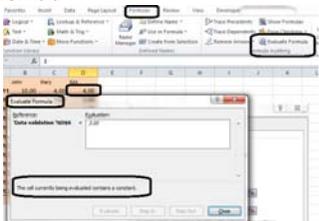

Advanced Excel 2010

Transform the data !

The Formula tab – take action

Function Library

Evaluate Formula –

Select cell than evaluate formula option to get results

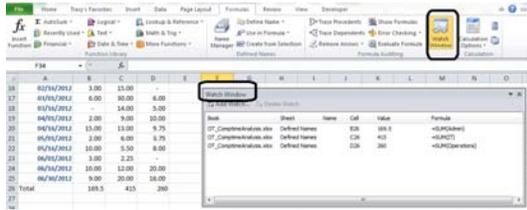Results here
Cell using data validation and contains a constant

Slide 1

Advanced Excel 2010

Transform the data !

The Formula tab – take action

Function Library

➡ *Watch Window* – monitor values of specified cells

Slide 2

Advanced Excel 2010

Transform the data !
Formula Tab

➡ *Rank data with Functions*

=*Percentile()* – specify ranking and return a value.

=*PercentRank()* – returns percentage based on specified value.

=*Quartile()* – returns value of cell range based on specified variable that divides distribution into four groups with equal frequency.

=*Rank()* – returns value base on the specified rank.

Slide 3

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Transform the data !
Formula Tab & Functions

➡ *Date functions*- for analyzing data

=*Today()* – displays current date

=*Now()* – displays current date and time

=*Date(Year, Month, Day)* – date displayed based on arguments

=*Days360()* – calculates # of days between two dates based on 360 calendar

=*NetWorkDays(StartDate,EndDate,Holidays*) – calculates number of work dates using specified dates

=*Year(Date)* – returns year portion of a date

=*Month(Date)* - returns month portion of a date

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**Transform the data !
Formula Tab & Functions**

Text Functions

=LEFT() – returns leftmost characters of cell.

=RIGHT() – returns right most characters of cell

=MID()- returns specified number of characters of a cell

=PROPER()- capitalizes first character of each word in a cell.

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Transform the data ! Formula Tab & Functions

Sum, Average, & Count Data with conditions

These functions calculate a range of cells based on ONE set of conditions

=SumIf() – sum data if it meets defined condition

=AverageIf() – count values if they fall within specified *conditions*

=CountIf()- count values if they meet specified conditions

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Transform the data ! Formula Tab & Functions

Calculate values based on multiple conditions conditionally

=SumIFS()- Adds the cells in range which meet multiple criteria

=CountIFS() - Applies criteria to cells across multiple ranges and counts the number of times all criteria are met

=AverageIFS()- Returns the average (arithmetic mean) of all the cells in a range that meet a multiple criteria

Excel 2010 allows ability to calculate with multiple conditions – up to 127 cell ranges and conditions

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Transform the data !
Formula Tab

- *Conditional Formulas – If Statement*

    Evaluate conditions with the If Statement Function – allows user to evaluate a condition in another cell or range of cells and place result in another cell.

    The logical test or condition something that may be evaluated True or False. Syntax is: = If(Logical Test, Value if True, Value if False)   IF(N3 >100, N3,0).

    Requires one of these comparison operators: =, <>, >,< ,>= , <=.

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Transform the data ! Formula Tab

Multiple If Functions

Nest up to 255 If statements to evaluate more than one condition

Type closing parenthesis for each If statement in nesting.
IF(N3<100,N3*0.25+N3,IF(N3>100,N3*0.75-N3,0))

- *If Functions with Multiple AND Conditions* –   AND allows you to test for multiple conditions and return a TRUE result if ALL conditions in function met. analyzing Data using
- *If Functions with Multiple OR Conditions* –   OR allows you to test for multiple conditions and return a TRUE result if ONE of the conditions met
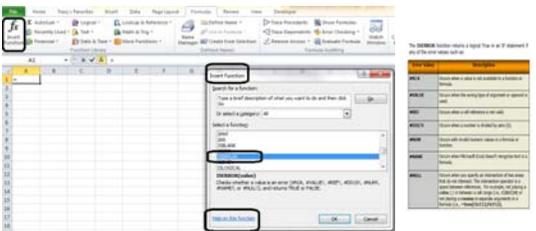

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Transform the data ! Formula Tab

=Is Error function

    Use with If Statement Function to replace error messages

    IS functions, http://office.microsoft.com/en-us/excel-help/is-functions-HP010342632.aspx

TIP Use Excel online for help with functions by using the insert function option

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Transform the data !
Formula Tab

- *VLookup* function– look up or retrieve data which exists in a list in different area of the workbook or another workbook
Quick Reference Card: VLOOKUP refresher, http://office.microsoft.com/en-us/excel-help/quick-reference-card-vlookup-refresher-HA101873816.aspx

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Innovative transformations of the data

- **Developer Tab**

Save time by automating routine data actions with a **Macro**

Macros are a set of instructions based on actions taken while working with worksheets and workbooks

Record the repetitive actions with a macro for future use

Saves time and streamlines work.

Store macros in personal macro workbook, *.xlsb file, so they are available in all workbooks

Unhide personal macro workbook to access personal macro workbook.

- Online Course for Macros - http://office.microsoft.com/en-us/excel-help/save-time-by-creating-and-running-macros-in-excel-2010-RZ102337714.aspx

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Innovate with automation
Macros
Use macros to automate things you do routinely such as adding your name to a document or formatting data

Quick access to saved macros from Quick access toolbar or custom ribbon

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References

- **For Dummies: Excel 2010 for Dummies; http://www.dummies.com/how-to/content/excel-2010-for-dummies-cheat-sheet.html**
- **For Dummies: The Essentials of Working with Excel 2010 Charts; http://www.dummies.com/how-to/content/the-essentials-of-working-with-excel-2010-charts.html**
- **PC Magazine: 5 Essential Excel 2010 Tips for Advanced Users; http://www.pcmag.com/article2/0,2817,2386981,00.asp**
- **PC Magazine: 14 Essential Excel 2010 Tips for Intermediate Users; http://www.pcmag.com/slideshow_viewer/0,3253,l=265740&a=265730&po=5,00.asp**
- **Critical Data analysis using Functions Excel 2010 University of California Berkeley, Hass School of Business; http://groups.haas.berkeley.edu/HCS/training/office2010/excel/UC%20Excel%202010%20-%20Module%204%20-%20Data%20Analysis.pdf**
- **Download Office 2010 training - PowerPoint presentations; http://office.microsoft.com/en-us/outlook-help/download-office-2010-training-HA101901726.aspx**
- **Microsoft Office; http://office.microsoft.com/**