



10 Ways To Efficiently Analyze Your Accounting Data in Excel

Live Demonstration

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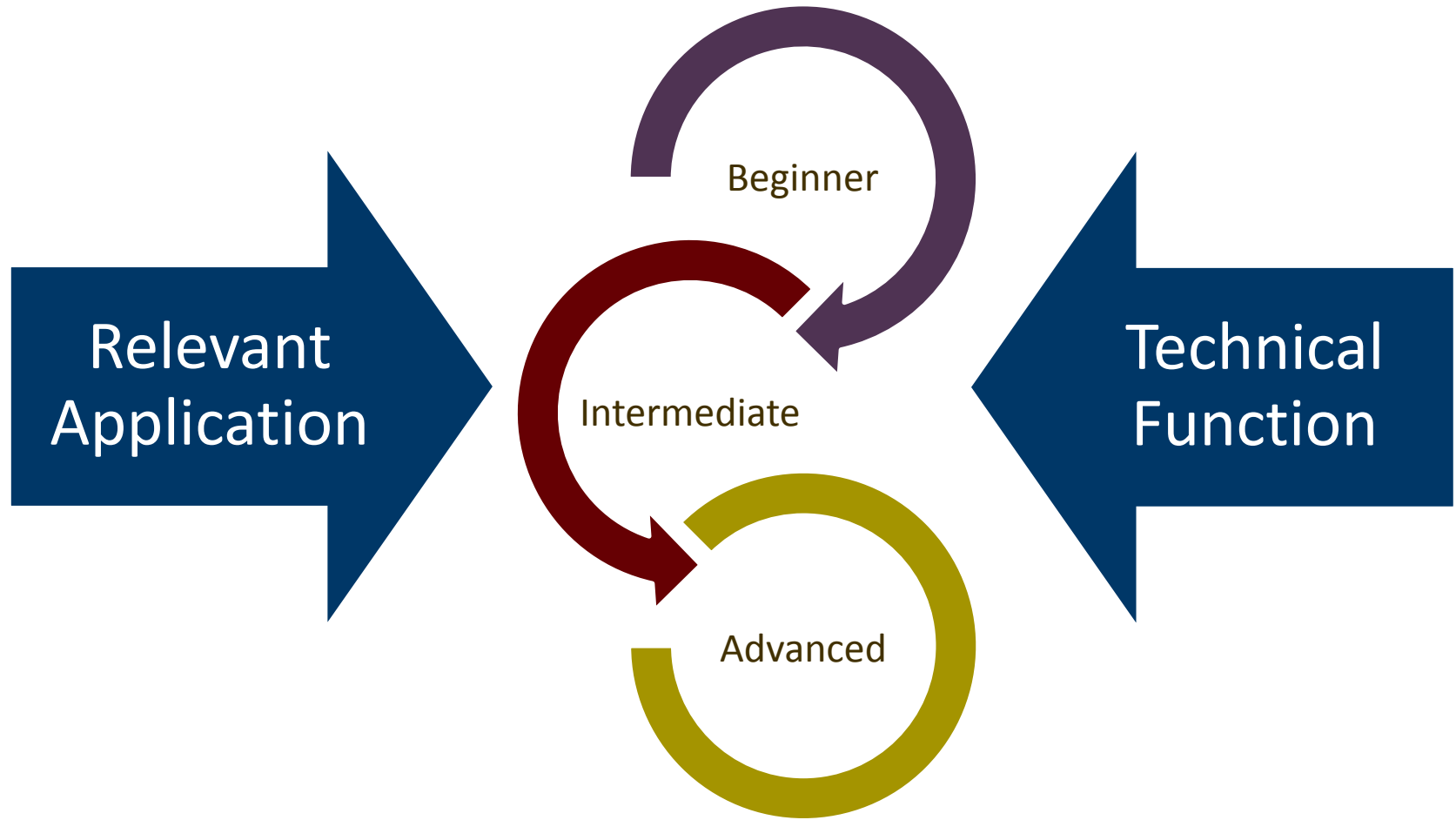


Learning Objectives

- Learn efficient techniques for analyzing accounting data in Excel
- Learn how to improve the efficiency and accuracy of financial reporting
- Identify techniques for more efficiently reconciling accounting data
- Perform a live demonstration of how to utilize some of Excel's most useful functions, including the following:
 1. Text to Columns
 2. Concatenate
 3. SUMIF, COUNTIF
 4. Conditional Formatting
 5. Grouping, Sorting, Filtering
 6. Vlookup/Hlookup
 7. Hyperlinking within excel documents
 8. Special Copying and Pasting
 9. IF Functions
 10. Pivot Tables
 - * Bonus Tips



Approach For Today's Session



1. Text to Columns – Application

- Useful for splitting the contents of one cell into multiple columns
- Helps analyze the data in greater detail
- Useful on trial balance reports with more complex reporting accounting systems
- Also useful on payroll reports



1. Text to Columns – Function

- When selecting the range of data to convert, do not include row or column headers.
- Text to Columns wizard is found on the Data tab in the Data tools group.
- If a new destination is not specified for the new columns, original data will be replaced by the split data. We recommend, inserting a column(s) to allow for the splitting of the content.
- Consider use of delimiters (often a comma, hyphen, or other symbol) or a fixed width.
 - Full name into First and Last name



2. CONCATENATE – Application

- Combines data items together into a single cell.
 - Make First and Last name into Full Name
- Allows for data analysis at a more detailed level.
 - E.g. analysis by account and fund/project/class
- Can be used to create unique IDs between two datasets.



2. CONCATENATE – Function

- This is a formula.
- Symbols or other elements not already included in a cell can be added to the data string using quotations.
 - i.e. adding a hyphen between two cells being joined would appear as **=concatenate(A1, "-",B2)**



3. COUNTIF / SUMIF – Application

- Automates counting and summarizing data based on a specific criteria.
- COUNTIF: count the number of cells that meet a certain criteria.
=COUNTIF(A2:A705, "computer") counts all cells containing the word "computer"
- SUMIF: sum the values in a range that meet criteria that you specify.
=SUMIF(A2:A705, " computer, " C2:C705) sums only the values in the range C2:C705, where the corresponding cells in the range A2:A705 equal "computer"



3. COUNTIF / SUMIF – Function

- This is a formula.
- Syntax for SUMIF:
 - SUMIF(range, criteria, [sum_range])
- Syntax for COUNTIF:
 - COUNTIF(range, criteria)
- Criteria can be in the form of a number, expression, a cell reference, text, or a function.
 - can be expressed as 32, ">32", B5, "32", "apples", or TODAY().



4. Conditional Formatting – Application

- Apply formats to a cell or range of cells, and have that formatting change depending on the value of the cell or the value of a formula.
 - have a cell appear bold only when the value of the cell is greater than 100
 - highlight duplicate cells
 - have cells that say “fully depreciated” highlighted green



4. Conditional Formatting – Function

- You can find this feature under the Home tab>Styles group
- Numerous variations on this function
- After you have applied a style, select your data, click **Conditional Formatting** on the ribbon, and then click **Manage Rules** to manually fine-tune your rules and formatting.



5. Grouping, Filter, & Sorting – Application

- Allows you to group large data sets by certain groups.
 - Easily show and hide different sections of your worksheet in order to better see the data set
- The easiest way to manipulated data sets so that you only see what you want to see.



5. Grouping, Filter, & Sorting – Function

- Data Tab>Outline group
- In the Data Tab>Sort and Filter group
- Ability to sort and filter by dates, numbers, text, etc.
- Use wildcards
 - Sm?th finds “smith” and “smyth”
 - *east finds “northeast” and “southeast”
- Ctrl + Shift + “L” – adds a filter with only keystrokes



6. VLOOKUP / HLOOKUP – Application

- You can use the **VLOOKUP** function to search the first column of a range (range: Two or more cells on a sheet. The cells in a range can be adjacent or nonadjacent) of cells, and then return a value from any cell on the same row of the range.
- Combining two datasets into one file/database.



6. VLOOKUP / HLOOKUP – Function

- Looks for a value in the leftmost column of a table, and then returns a value in the same row from a column you specify.
 - Define a value (the lookup_value) for the formula to look for. It looks for this value in the leftmost column of a table (the table_array)
 - Note: If at all possible use a number for the lookup_value. This makes it a lot easier to make sure the data you are getting back is a correct match
 - Read: 1) Find this value; 2) on this table; 3) give me the data in the [3rd] column to the right; 4) as long as it's an exact match
- **HLOOKUP** does the same, but from the top row down



7. Hyperlinking – Application

- In a worksheet with large amounts of data or many tabs, easily navigate to a specified location.
- Can create a hyperlink in any cell, then, click that hyperlink to go to the specified location.
- Useful in:
 - large financial statement files
 - board reports
 - large datasets



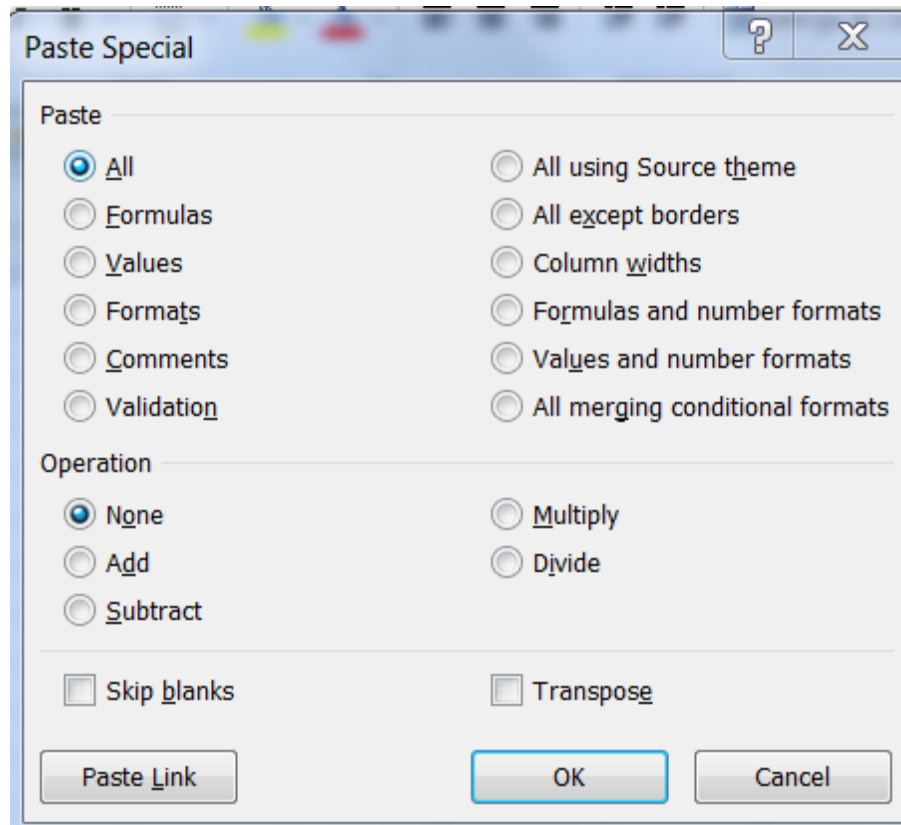
7. Hyperlinking – Function

- Use Insert Hyperlink command
 - Copy, paste as HYPERLINK
- Drag and drop
 - Copy a pasted HYPERLINK to another cell
- Use HYPERLINK button on top ribbon
 - Copy, navigate to specified cell, click HYPERLINK button



8. Special Copying & Pasting – Application

- Useful to paste data in a different or native state
 - E.g. to remove formulas from a workbook (copy and paste values)



8. Special Copying & Pasting – Function

- Set up selected data in a specific way from the start.
 - Keyboard shortcut: Ctrl+C, Ctrl+V
- Various Paste options:
 - Paste everything
 - Paste only values (eliminates formulas or formatting)
 - Paste formulas - pastes only the formulas
 - Paste formatting – pastes only the formatting
 - Transpose – Orients horizontal data vertically & vertical data horizontally
 - Paste Special – various other specific options



9. IF Statements – Application

- Checks whether a condition is met, returns one value if True and another value if False.
 - Quickly analyze a large number of data
 - Can be either logical or mathematical
 - Recalculate depreciation or lease payments
 - Use with more complex data, such as IFTHEN and IFOR
- Useful when basic logic needs to be applied to a large dataset.



9. IF Statements – Function

- Formula: =IF(logical_statement, return this if logical statement is true, return this if logical statement is false).
- Nested if then functions can create more complex logical equations.



10. Pivot Tables – Application

- Use to summarize large amounts of data for reports.
- Doing groupings of accounts outside of the accounting system.
 - E.g. grantor reports or board reports
- Ad hoc analysis based on groupings of data.
- Analyzing data both horizontally and vertically.



10. Pivot Tables – Function

- How to create a Pivot table:
 1. Open your original spreadsheet and remove any blank rows or columns.
 2. Make sure each column has a heading, as it will be carried over to the Field List.
 3. Make sure your cells are properly formatted for their data type.
 4. Highlight your data range.
 5. Click the **Insert** tab.
 6. Select the **PivotTable** button from the **Tables** group.
 7. Select **PivotTable** from the list.
 8. Double-check your **Table/Range:** value.
 9. Select the radio button for **New Worksheet**.
 10. Click **OK**.
 - ◇ A new worksheet opens with a blank pivot table. You'll see that the fields from our source spreadsheet were carried over to the **PivotTable Field List**.



10. Pivot Tables – Function

- What you need to know:
 - Must have a header in every column of the data
 - Numbers need to be converted to numbers rather than text if you plan to sum the data
 - If you change the source data, must hit “refresh” in Pivot Table
 - Sometimes when you move around your pivot table the **PivotTable Field List** disappears. To get it back, click any cell with a value



Bonus Tips - Cell editing

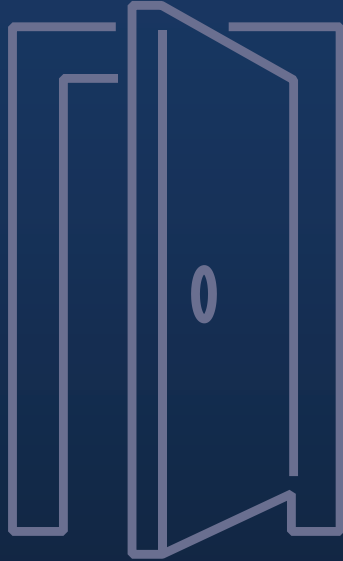
- TRIM
 - Gets rid of any space in a cell, except for single spaces between words
 - Useful because you often run into situations where you pull data from a database and for some reason extra spaces are put in behind or in front of legitimate data
- Right
 - Returns the specified number of characters from a text string
 - RIGHT gives you the number of characters from the right
 - LEFT gives you the number of characters from the left
 - MID gives you the specified number of characters from the middle of the word
 - ◇ You tell the MID formula where to start with the start_number and then it grabs the specified number of characters to the right of the start_number



Bonus Tips

- Math Formulas
 - Locking cell references: F4
 - DDIFF: =DDIFF(A2,B2,C1) shows the difference between A2 and B2 the same as =A2-B2, but only if value is larger than value in c2 (or \$C\$2)
 - PDIFF: =PDIFF (A2,B2) will be same as =A2/B2, but will return 0% instead of “error” if B2 is 0. Can also use =PDIFF(A2,B2,C1)
 - Alt + = = quickly sums all cells above





Questions?

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