



35
Excel Tips
**That Could Save
You from Working
All Night**

INTRODUCTORY NOTE

What is it: The following material was developed for the Excel training program.

Target audience: 1st year associates and business analysts, although there is nothing wrong doing this training as well with EMs and APs.

Duration: 3-4 hours to walk through the explanations and give everyone a chance to actually practice.

Faculty: Since the seniors showed that they can do and therefore they can expect their team members to do the same.

Final comment: The original material was not intended for self-study purposes and therefore may be a little be too brief and cryptic in some cases. In case you have any improvement ideas please feel free to e-mail them to the author.

Thank you: We've received great feedback and many ideas how to improve this document. Thanks.

35 EXCEL TIPS THAT COULD SAVE YOU FROM WORKING ALL NIGHT

1. Split windows and freeze panes
2. **Hide** and **Unhide** command
3. Moving around a spreadsheet with Ctrl, Shift, and Arrow keys
4. **Name** cells/ranges
5. **Sort** command
6. Toggling among relational and absolute references
7. **Fill down** and **fill right** commands
8. **IF** function
9. **AND** and **OR** functions
10. **SUM** and **SUMIF** functions
11. **Subtotals and Totals**
12. **SUMPRODUCT** function
13. **NPV** function
14. **COUNT** functions
15. **ROUND**, **ROUNDUP** and **ROUNDDOWN** functions
16. **VLOOKUP** and **HLOOKUP** functions
17. **Insert Function** command
18. **Paste Special** command
19. **Auditing** features
20. **Goal Seek** add-in
21. **Solver** add-in
22. **Data tables**
23. **Scenarios** add-in
24. **Pivot** Tables
25. **Protecting** cells and worksheets
26. **Editing** multiple worksheets simultaneously
27. **Conditional** formatting
28. **Autofilter** command
29. **Customize** tool bars
30. Changing default workbook
31. **Group** and **Ungroup** your spreadsheet
32. Switch off the Microsoft Actors
33. **Clean up** text
34. **Keyboard** shortcuts
35. Final thoughts

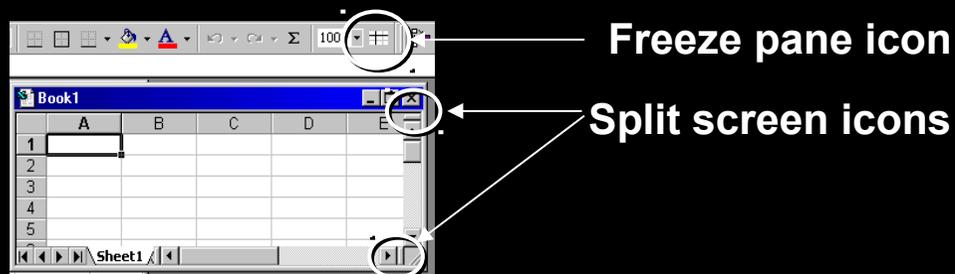
1. SPLIT WINDOWS AND FREEZE PANES

Why you need to know this

- Splitting a window allows you to work on multiple parts of a large spreadsheet simultaneously
- Freezing the pane allows you to always keep one part of the spreadsheet (e.g., column or row labels) visible

How you use this feature

- Drag the split horizontal and split vertical icons to the desired positions
- Click on the freeze pane icon from the tool bar to freeze the panes



Exercise

- Split the screen so that:
 - The row with column labels shows up in the top pane
 - The column with store names show up in the left pane
- Freeze the panes

35 Excel Tips

2. HIDE AND UNHIDE COMMAND

Why you need to know this

- Allows you hide and unhide particular rows or columns
 - Simplifies working with the spreadsheet
 - Prevent certain information from being seen

How you use this feature

- Select the row(s) or column(s) to be hidden/unhidden
- Select *Format : Row : Hide/Unhide* or *Format : Column : Hide/Unhide*

Exercise

- Hide the Avg Sale/Ticket column

35 Excel Tips

3. MOVING AROUND A SPREADSHEET WITH CTRL, SHIFT, AND ARROW KEYS

Why you need to know this

- Save you lots of time
- Move the first or last cell of a contiguous data block without scrolling

How you use this feature

- **Ctrl-Arrow** : Move to the first/last data cell in the arrow direction
- **Ctrl-Shift-Arrow** : Selects the cells between the current cell and the first/last data cell

Exercise

- Select all cells with data using the Ctrl, Shift, and Arrow keys

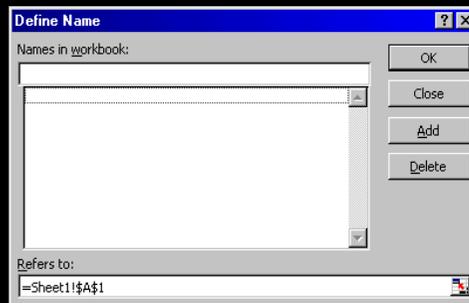
4. NAME CELLS/RANGES

Why you need to know this

- Allows specific cells or cell ranges to be referred to by name
- Allows you to write equations such as = Quantity*Cost instead of =\$B\$12*\$C\$4

How you use this feature

- Select the cell or cell range
- Select *Insert : Name : Define* from the menu bar



Exercise

- Define cells A2:A125 as “Sequence”

35 Excel Tips

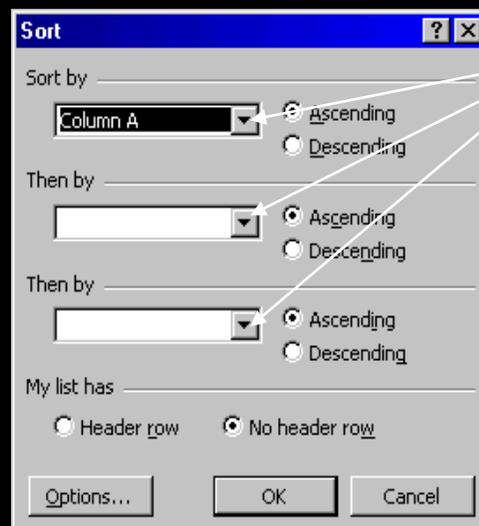
5. SORT COMMAND

Why you need to know this

- **Correctly sorting a series of rows or columns without disassociating the data is critical to many modeling efforts**

How you use this feature

- **To sort by single category, just click into column, NEVER highlight column (would destroy table integrity)**
- **To use multiple criteria, click any cell of data table, select Data...Sort**
- **Data table will be selected**



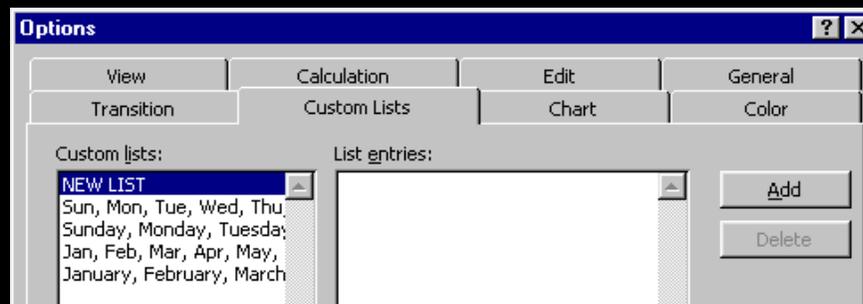
Can sort by up to 3 categories, use drop lists to select fields, specify A-Z or Z-A

35 Excel Tips

5. SORT COMMAND (CONTINUED)

How you
use this
feature

- Indicate if have Header row, which will not be included in sort
- Select Options to use Custom lists (create first, see below)



- Select Tools/Options/Custom Lists to create specialized sort orders, e.g.
 - To sort months and weekdays according to their calendar order instead of their alphabetic order
 - To rearrange lists in a specific order (such as High/Medium/Low entries)
- Create your own sorting list with labels as you like

Exercise

6. TOGGLING AMONG RELATIONAL AND ABSOLUTE REFERENCES

Why you
need to
know this

- Saves you lots of time

How you
use this
feature

- F4 key toggles through the different options

7. FILL DOWN AND FILL RIGHT COMMANDS

Why you need to know this

- Saves you lots of time
- Allows for copying of cell content to contiguous cells with a single keystroke

How you use this feature

- Select the cell with the content to be copied and drag to select the cells to which the content should be copied
- Ctrl-R to fill right
- Ctrl-D to fill down

Caution!!

- Double-check your formulas for absolute vs. relative references!!

Exercise

- Calculate the total daily sales for each store

35 Excel Tips

8. IF FUNCTION

Why you need to know this

- Conditional comparisons are used in virtually all spreadsheets
- Knowing how to use IF in a nested manner and in combination with other functions will save hours of time

How you use this feature

- `IF(Comparison,TrueAction,FalseAction)`
- `IF(Comparison,TrueAction,)` ==> Cell shows 0 if condition is false
- `IF(Comparison,TrueAction,"")` ==> Cell shows blank if condition is false

Exercise

- Create a “Mumbai” variable
 - 1 if the store is in Mumbai
 - 0 if the store is in other places

35 Excel Tips

9. AND AND OR FUNCTIONS

Why you need to know this

- Used with the IF function to enable more complicated logical comparisons

How you use this feature

- **AND(Comparison 1,Comparison2,Comparison3,...)**
- **OR(Comparison 1,Comparison2,Comparison3,...)**

Exercise

- Create a variable that calculates daily sales per branches only for:
 - KFC stores in Mumbai with size larger than 50 branches
 - All BK stores

35 Excel Tips

10. SUM AND SUMIF FUNCTIONS

Why you need to know this

- **SUM** is used in virtually all spreadsheets
- **SUMIF** can save lots of time in most spreadsheets if you know how to use the function

How you use this feature

- **SUM(Range1,Range2,Value1,...)**
- **SUMIF(Range,"Comparison",SumRange)**
 - If a SumRange IS NOT specified, SUMIF sums the cells meeting the Comparison criteria in the specified Range
 - If a SumRange IS specified, SUMIF sums the cells in SumRange where the corresponding cells in Range meets the Comparison criteria
- **NOTE:** The "" signs must be used for the Comparison value

Exercise

- Calculate the total store space for stores larger than 50 branches
- Calculate the total daily sales for all stores larger than 50 branches

11. SUBTOTALS AND TOTALS

Why you need to know this

- Want to add lines with subtotals in your P&L or balance sheet, but still need to run the total over all numbers? Don't want to get confused with nested subtotals and totals in your spreadsheet?

How you use this feature

- Instead of '=sum(range)' add '=subtotal(9,range)' where you need a subtotal or total.
- You may nest this function as you like. Excel keeps track of everything

Exercise

- Create a simple column with various numbers
- Add various subtotals running over various parts of your spreadsheet and finally over the whole column

12. SUMPRODUCT FUNCTION

Why you
need to
know this

- If you need to multiply two columns and need the sum of the multiplication, sumproduct comes easy.

How you
use this
feature

- Insert `=sumproduct(range1,range2)`

Exercise

- Multiply two columns or rows and get the sum of it

13. NPV FUNCTION

Why you need to know this

- Of course you can create your own discounting table and then calculate the NPV of your cash flow series or just use the NPV function

How you use this feature

- Insert `=NPV(discount rate,cash flow numbers,...)`
- The discount rate is in percent
- The cash flow numbers are either an array or individual numbers in individual cells
- Attention: The first cash flow number is in period 1, e.g. the end of the period. If you have for example an initial investment in period 0, just type `=NPV(...)+period 0 payment` in your calculation

Exercise

- Create a list of random cash flows and calculate the NPV with the NPV function

14. COUNT FUNCTIONS

Why you
need to
know this

- Prevents you from wasting time counting items manually or creating dummy variables to count such items

How you
use this
feature

- **COUNT(Range1,Range2,Value1,...)** ==> count the number of cells containing numbers
- **COUNTA(Range1,Range2,Value1,...)** ==> count the number of non-empty cells
- **COUNTBLANK(Range)** ==> count the number of empty cells in the range
- **COUNTIF(Range,"Criteria")** ==> count the number of cells in the Range containing the Criteria. NOTE: The "" signs must be used for the Criteria value

Exercise

- Calculate the number of KFC stores in the dataset

15. ROUND, ROUNDUP AND ROUNDDOWN FUNCTIONS

Why you need to know this

- Many situations exist when you need to have exact numbers instead of various fractions in your calculations (e.g., there cannot be 536.235 bank branches)

How you use this feature

- **ROUND(Number,Digits) ==>** Round the number (or cell) to the specified number of digits
 - If Digit = 0, then Number is rounded to nearest integer
 - If Digit > 0, then Number is rounded to the specified number of decimal places
 - If Digit < 0, then Number is rounded to the specified number of digits left of the decimal place
- **ROUNDDOWN(Number,Digits) and ROUNDUP(Number,Digits)** work the same way as **ROUND**, but the direction of rounding is specified by the function

Exercise

- Calculate a rounded Avg Sale/Ticket variable, rounding to the nearest 10 Won

16. VLOOKUP AND HLOOKUP FUNCTIONS

Why you
need to
know this

- Allows you to automatically lookup a particular cell of data from a larger data range. This is especially useful when you have
 - A large data section that contains information for multiple records somewhere on the spreadsheet (e.g., a small database)
 - A calculation area somewhere else, and you need to refer to some specific data elements for specific records

Continued

16. VLOOKUP AND HLOOKUP FUNCTIONS (CONTINUED)

How you
use this
feature

- **VLOOKUP and HLOOKUP** allows you to find a specific cell of data in a larger data range
 - Use **VLOOKUP** when each row contains a separate record and the associated columns contain data for that one record
 - Use **HLOOKUP** when each column contains a separate record
- **VLOOKUP(SearchValue,Range,ColumnNumber,Error)** ==> look for a value in the row specified by SearchValue and the column specified by ColumnNumber
 - SearchValue indicates the “match key” (i.e., find the row that contains the SearchValue in the first column)
 - Range specifies the cells containing the data
 - ColumnNumber specifies the column that contains the data element you want
 - Error determines what happens when Excel does not find the exact SearchValue you want. **FALSE** leads Excel to display a #N/A when an exact match cannot be found. **TRUE** leads Excel to display the next smaller value than SearchValue
- **HLOOKUP(SearchValue,Range,RowNumber,Error)** ==> look for a value in the column specified by SearchValue and the row specified by RowNumber

Previous

Continued

NOTE: *The 1st column of data must be sorted in ascending order when using VLOOKUP, and the 1st row of data must be sorted if using HLOOKUP*

16. VLOOKUP AND HLOOKUP FUNCTIONS (CONTINUED)

Tip

- Define a name for the cells containing the data and use that name as the Range. Do not include the row/column label in the named range because this would break the ascending sort rule above.
- Insert an extra row above your column label to number the columns

Exercise

- Use VLOOKUP to find out how many seats are in the KBN store? How many passers-by for the store?

• [Previous](#)

[Continued](#)

16. VLOOKUP AND HLOOKUP FUNCTIONS (CONTINUED)

Number the columns to easily check your formulas

Column:	1	2	3
Type order	Name	Age	Weight
1	John	33	189
2	Jane	24	115
3	Tim	11	60
4	Rachel	59	139
5	Alan	60	150

Define a name for cells in your data Range

Need to sort in ascending order for VLOOKUP function to work properly

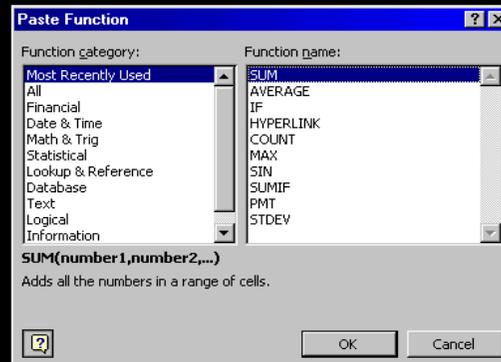
17. INSERT FUNCTION COMMAND

Why you need to know this

- What do you do if you do not know what functions are available or how to enter the arguments for a function?

How you use this feature

- Select the cell
- Select *Insert : Function* from the menu bar



Exercise

- Calculate the median daily ticket count for all the stores

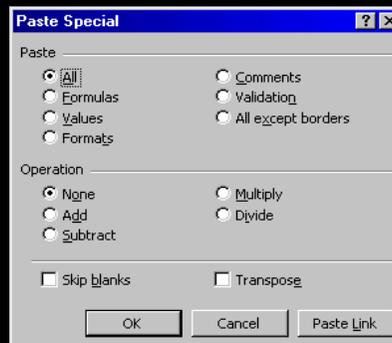
18. PASTE SPECIAL COMMAND

Why you need to know this

- Saves you lots of time
 - Retyping formulas
 - Converts formulas into values
 - Reformatting cells
 - Transposing cells (i.e., convert row-entered data blocks into column-entered ones)

How you use this feature

- Copy the cells of interest
- Place the cursor where you want to past the information
- Select *Edit : Paste Special* from the menu bar
- Select the appropriate options from the dialog box that appears



Exercise

- Convert the Rounded Avg Sale/Ticket calculations into values (i.e., get rid of the formulas)
- Copy and paste the entire dataset into a new spreadsheet in transposed manner

19. AUDITING FEATURES

Why you need to know this

- Quickly find the cells referenced by a formula and/or quickly find which cells reference a particular cell of interest

How you use this feature

- Select **View : Toolbars : Customize** from the menu bar. Check the Auditing box from the Toolbars tab
- Click on the cell of interest
- Select the Trace Precedents or Trace Dependents icon from the Auditing Toolbar



Exercise

- Find the cells that references the Daily Ticket Count for the Shoppers Stop store

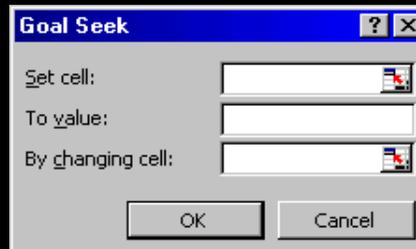
20. GOAL SEEK ADD-IN

Why you need to know this

- Easily find what one input variable needs to be to achieve some desired result in a calculation

How you use this feature

- Select the calculated cell
- Select *Tools : Goal Seek* from the menu bar
- Enter the desired resulting calculation into the “To Value” form in the dialog that appears
- Enter the input cell in the “By changing cell:” form



Exercise

- How many additional daily tickets would the Inorbit store need to have a total daily sales of 2,000,000 Won?

21. SOLVER ADD-IN

Why you
need to
know this

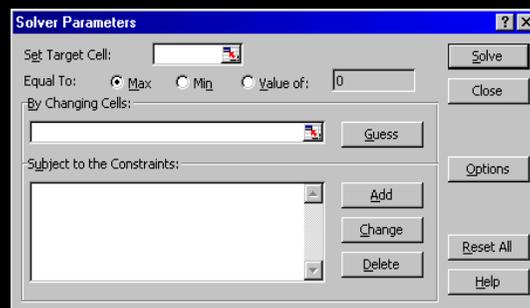
- Allows you to use linear programming to find the optimal inputs to achieve some desired calculational result (e.g., maximize revenues by increasing daily tickets, increasing store size, average sale/ticket, etc. simultaneously)
- Use Solver instead of Goal Seek when:
 - You need to place constraints on the input variable (e.g., cannot open a store for more than 24 hours a day)
 - More than 1 input variables are involved
 - You want to minimize or maximize the resulting calculation in addition to just setting the calculation to a predetermined value

Continued

21. SOLVER ADD-IN (CONTINUED)

How you
use this
feature

- Select the final calculated cell, then select *Tools : Solver* from the menu bar
- Select what you want to do from the “Equal to” section (i.e., maximize, minimize, or set to a specific value)
- Reference the input cells (note, separate cells by using a comma or “:” if cells are contiguous)
- If the input values have constraints, click on Add to enter the constraints
- Click on Solve



Exercise

- What is the maximum daily sales per branch for the KFC store if:
 - The store can be opened a maximum of 18 hours/ day, 7 days/week
 - Store size can expanded up to a maximum of 87 branch

22. DATA TABLES COMMAND

Why you need to know this

- Simplest way to run sensitivity analyses

How you use this feature

- Input the values you want to test for a particular variable on separate rows (e.g., A6:A13)
- In the cell above and to the right of the first sensitivity value, reference the final result of your calculations (e.g., A5 = C3)
- Select the cells containing the calculation and input variables (e.g., A5:B13)
- Select *Data : Tables* from the menu bar
- Input the cell referenced by the formula in the “Column input cell” (e.g., A2). This example uses in “Column input cell” because the value to test in the sensitivity analysis are arranged in a single column

	A	B	C
1	A	B	A * B
2		3	5
3			15
4			
5	A Inputs	15	
6		1	5
7		2	10
8		3	15
9		4	20
10		5	25
11		6	30
12		7	35
13		8	40

Table

Row input cell:

Column input cell:

OK Cancel

22. DATA TABLES COMMAND (CONTINUED)

Exercise

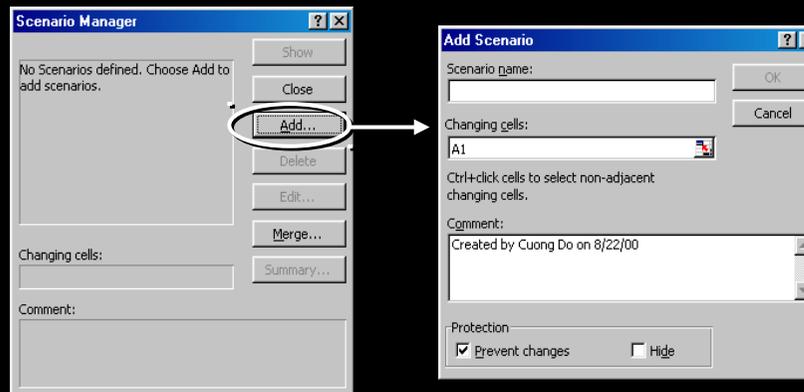
- What daily total sales would the KFC store have if its daily ticket counts ranged from 400 to 600 each day (in increments of 50)?

23. SCENARIOS ADD-IN

Why you
need to
know this

How you
use this
feature

- You've created a model and need to run various scenarios. Then use the scenario function under the tools menu. Keeps your inputs and outputs from the model nicely together
- Assign names to the excel cells that act as input parameters for your model
- Start the scenario function by selecting *Tools : Scenarios* from the menu bar.
- Click Add to enter your first scenario
 - Create a name
 - Select ALL cells that will be your input to the model.
- Assign the desired scenario value to each input parameter.
- Add more scenarios as needed
- When finished click on summary and select scenario summary (the pivot table is not so helpful)



23. SCENARIOS ADD-IN (SIMPLE EXAMPLE)

Objective:

You want to build a simple model to understand under which scenarios Airbus should build the A3XX a next generation super large airplane with more than 600 seats

Simple model:

$\text{Profit} = \text{number of planes sold} \times \text{price} \times \text{margin} - \text{development cost}$

Scenarios	Worst case	Realistic	Best case
No. of planes	200	350	500
Price (million. USD)	120	130	150
Margin	20%	25%	30%
R&D	13 billion USD	12 billion USD	11 billion USD

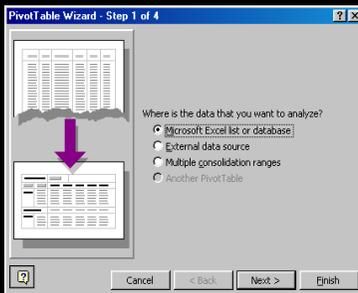
24. PIVOT TABLES

Why you need to know this

- Most powerful tool to arrange huge amounts of data in a more structured way than pure sorting. In particular helpful to run quick sums, averages, distributions, etc. in combination with a structure criteria, e.g. total number and average sales per store size band

How you use this feature

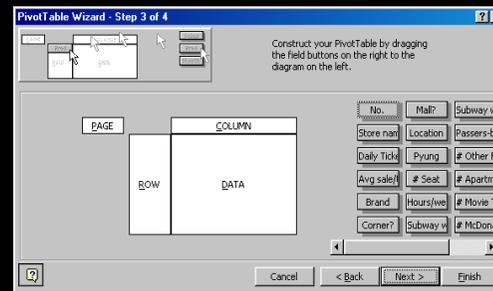
- Select Data: PivotTable Report...



Step 1: Microsoft Excel list



Step 2: Select the relevant data area



- Step 3: Drag and drop data elements on row and column (this is your table structure), the data you want to analyze on the data area
- Step 4: Just press Finish



24. PIVOT TABLES (CONTINUED)

Exercise

- Draw a distribution chart for the number of stores per size in branches bucketed each 10 branch wide
- Arrange the store distribution by store size (each 10 branch) and daily tickets (each 100 tickets) and show the number of stores per each category

25. PROTECTING CELLS AND WORKSHEETS

Why you need to know this

- Sometimes you want to give your Excel file to someone else and prevent them from changing the formulas for seeing some hidden cells

How you use this feature

- Protecting a spreadsheet or workbook involves two steps
 - Designating which cells to be locked or hidden
 - Protecting the spreadsheet or workbook
- Note several weird peculiarities:
 - The default for all cells in a spreadsheet is LOCKED. So if you want the receiver of your worksheet to change the content of a cell, unlock the cell before protecting the spreadsheet
 - The formulas in a cell can be seen even if the spreadsheet is lock -- UNLESS you hide that cell before protecting the spreadsheet
- To lock/unlock and hide/unhide a cell, select the cell(s) and select *Format : Cell*. Select the Protection tab when the dialog box appears
- To protect/unprotect a spreadsheet, select *Tools : Protection : Protect Sheet*

Exercise

- Protect the dataset spreadsheet
 - Allow the user to change the data
 - Lock and hide the formulas you entered

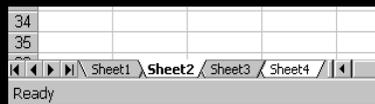
26. EDITING MULTIPLE WORKSHEETS SIMULTANEOUSLY

Why you
need to
know this

- Avoid having to redo your work on multiple spreadsheets in a single workbook

How you
use this
feature

- Select the first spreadsheet to be edited
- Hold the Ctrl key while clicking on the additional spreadsheets
- Do your editing



Exercise

- Try it

27. CONDITIONAL FORMATTING

Why you need to know this

- Sometimes you would to color the output of cells in different colors, e.g. negative numbers in red, positive numbers in black, or add a frame, etc.

How you use this feature

- Mark the relevant fields and select *Format: Conditional Formatting*
- Select the criteria for the format and adjust the format. You can actually change the font, the border and the color
- Click on *Add* to select additional criteria for the formatting

Exercise

- Format a cell to be in red font, with blue background for negative numbers and in bold font with thick border, if the value is above 10

28. AUTOFILTER COMMAND

Why you need to know this

- You have a huge pile of data and quickly want to find some specific information, e.g. all sets that meet a criteria or the top 10 items etc.

How you use this feature

- Click into your table or better mark the data area and select *Data: Filter: Autofilter*
- Using the drop-down boxes per item allows you to display only specific filtered information
- Selecting multiple matches (up to 3 maximum with autofilter) you can narrow down your search
- Or add your own criteria for filtering by clicking on the custom criteria

Exercise

- Find the stores who belong to the top 10% in terms of average sales per ticket AND the top 10 in terms of store size in branch

29. CUSTOMIZE TOOL BARS

Why you
need to
know this

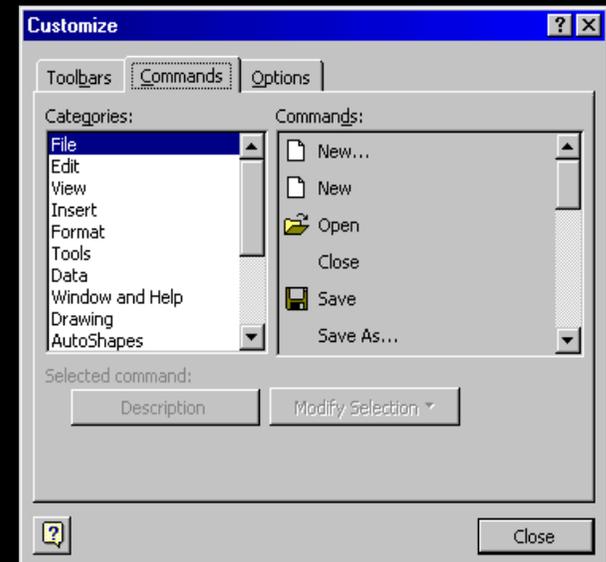
- How many icons on the tool bar to you use regularly?
- How often do you have to use the menu bar or mouse to do something you wish were accessible with a single click?

How you
use this
feature

- Select View : Toolbars : Customize
- Click on the Commands tab
- Drag items on and off the toolbar as you wish

OR

- Right click toolbar area
 - Select Customize
 - Select Commands tab in Customize dialog box
 - From appropriate menu, find the command for which you want to add button
 - Drag button to location on toolbar



29. CUSTOMIZING YOUR TOOLBAR (CONTINUED)

How you
use this
feature

- Other favorites ...

-  • Paste values
-  • Select visible cells
-  • Save as
-  • Show comment (toggles it)
-  • Set print area
-  • Page setup
-  • Merge cells
-  • Auto filter

...or create *your own* icons!

 Auto filter off – show all

Exercise

- Modify your toolbar as desired

30. CHANGING DEFAULT WORKBOOK

Why you
need to
know this

- How often do you use the menu bar to change the normal font or number formats?
- You can create the basic number and font formats you use regularly, save it as a template, and have Excel use that template every time you create a new workbook

How you
use this
feature

- Create a workbook with the formatting you use regularly and save it under the name “Book” and Template format
- Move the “Book” template to the *Microsoft Office : Office : Xlstart* folder

Exercise

- Create your default workbook

31. GROUP/UNGROUP PARTS OF SPREADSHEETS

Why you need to know this

- How often would you like to hide or unhide parts of a complex spreadsheet?
- If your answer is “very often”. You will like to group/ungroup function instead of the hide/unhide command, since you will be able to toggle between hidden or displayed columns or rows.

How you use this feature

- Mark the row or column that you would like to “fold”, i.e. hide for the moment.
- Click on *Data: Group* and *Outline: Group*
- To “fold” click now on the “minus” sign outside of your column or row
- You may also group or ungroup hierarchically

Tip

- Group some parts in your spreadsheet
- Also try to remove the grouping

Exercise

- Use the two “arrow” buttons, which you find on the pivot table toolbar (right click on any toolbar and select PivotTable)

32. SWITCH OFF THE MICROSOFT ACTORS

Why you need to know this

- Also find the Microsoft Actors more disturbing than helpful?
- Always popping up at the wrong moment

How you use this feature

- Excel 97
 - Start the Windows Explorer
 - Go to the directory Program Files: Microsoft Office: Office: Actors
 - Rename the directory “Actors” to “Dead Actors”
- Excel 2000
 - Go to Tools : Options : Edit and switch off „Provide feedback with animation“

Exercise

- Try to eliminate the Actors

33. CLEAN UP TEXT

Why you
need to
know this

- Often clients have data on their mainframe. The best you can get for your PC is a text file dump. This trick will help you see through the data „mess“ you've received.

How you
use this
feature

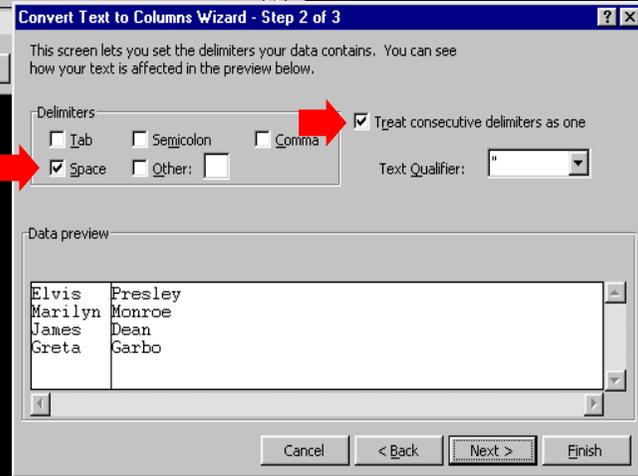
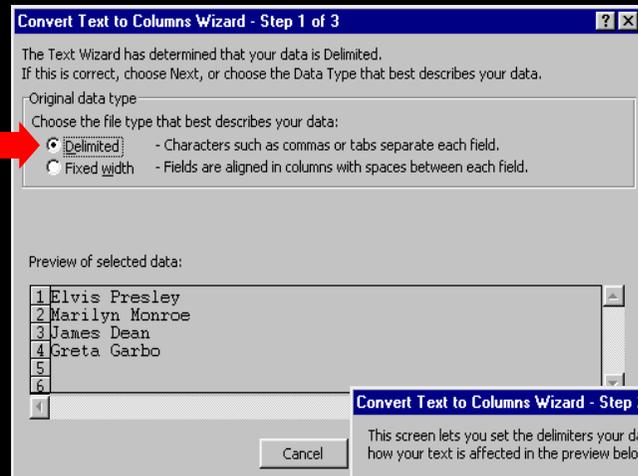
- One easy method to split text into separate columns is the Data/Text to Column Wizard
 - Select the cells
 - Select Data/Text to Column

	A	B	
1	Elvis Presley		
2	Marilyn Monroe		
3	James Dean		
4	Greta Garbo		
5			

33. CLEAN UP TEXT (CONTINUED)

How you use this feature

- Check that Excel choose correct setting, change as needed



33. CLEAN UP TEXT (CONTINUED)

How you
use this
feature

- Be sure to supply the destination
- Click finish

Convert Text to Columns Wizard - Step 1 of 3

This screen lets you select each column and set the Data Format.

'General' converts numeric values to numbers, date values to dates, and all remaining values to text.

Column data format:

- General
- Text
- Date: MDY
- Do not import column (Skip)

Destination: =\$B\$1

Data preview

General	General
Elvis	Presley
Marilyn	Monroe
James	Dean
Greta	Garbo

Buttons: Cancel, < Back, Next >, Finish

Note

- Be sure there are enough empty columns for your conversion at the destination or Excel will **OVERWRITE** the contents of the cells
- Split data appears in 2 columns

	B	C
Elvis	Presley	
Marilyn	Monroe	
James	Dean	
Greta	Garbo	

34. KEYBOARD SHORTCUTS

Formatting keys

Alt + `	• Display the style dialog box
Ctrl + Shift + ~	• General Num. Format
Ctrl + Shift + \$	• Currency format
Ctrl + Shift + %	• Percentage format
Ctrl + Shift + !	• Comma format
Ctrl + Shift + &	• Outline border
Ctrl + Shift + _	• Remove borders
Ctrl + b	• Bold
Ctrl + i	• Italic
Ctrl + u	• Underline
Ctrl + 9	• Hide rows
Ctrl + Shift + 9	• Unhide rows
Ctrl + 0	• Hide columns
Ctrl + Shift + 0	• Unhide columns
Ctrl + 1	• Format Dialog Box
Ctrl + 5	• Strike Through
Shift + Space	• Select the entire row
Ctrl + Space	• Select the entire column

34. KEYBOARD SHORTCUTS (CONTINUED)

Formatting keys

- | | |
|------------------------------|---|
| Ctrl + a | • Select the entire worksheet |
| Ctrl + x/c/v | • Cut/copy/paste |
| Ctrl + d/r | • File cells down/right |
| CTRL+SHIFT+* | • Select the current region around the active cell (the current region is an area enclosed by blank rows and blank columns) |
| SHIFT+ arrow key | • Extend the selection by one cell |
| CTRL+SHIFT+ arrow key | • Extend the selection to the last nonblank cell in the same column or row as the active cell |
| SHIFT+HOME | • Extend the selection to the beginning of the row |
| CTRL+SHIFT+HOME | • Extend the selection to the beginning of the worksheet |
| CTRL+SHIFT+END | • Extend the selection to the last cell used on the worksheet (lower-right corner) |

34. KEYBOARD SHORTCUTS (CONTINUED)

Windows and Workbook keys

Ctrl + F4	• Closes workbook window
Alt + F4	• Closes Excel
Ctrl + F10	• Maximizes the workbook
Ctrl + F9	• Minimizes the workbook
Ctrl + F5	• Restore window size
F6	• Next pane
Shift + F6	• Previous pane
Ctrl + F6	• Next window
Ctrl + Tab	• Next window
Shift + F11	• Inserts a new sheet
F11	• Create a Quick Chart Sheet
Ctrl + s	• Saves the workbook
F12	• Saves As
Ctrl + o	• Opens a workbook
Ctrl + n	• Creates a new workbook
Alt + F8	• Macros Dialog Box
Alt + F11	• Visual Basic Editor

34. KEYBOARD SHORTCUTS (CONTINUED)

Windows and Workbook keys

- | | |
|---------------------------------|--|
| ALT + TAB | • Switch between applications |
| CTRL + TAB | • Switch between open Excel files |
| CTRL + Page Up/Page Down | • Go to previous/next worksheet |
| CTRL + Home/End | • Go to the first/last cell of the worksheet |
| CTRL + arrow key | • Go to the next empty cell |

Auditing and Calculation keys

- | | |
|-------------------------|---|
| Ctrl + ' (~) | • Toggle formula display |
| Ctrl + [| • Selects cells directly referred to by formulas (Precedent Cells) |
| Ctrl + Shift + { | • Selects directly and indirectly referred to cells |
| Ctrl +] | • Selects only cells with formulas that refer directly to the active cell (Dependent Cells) |
| Ctrl + Shift + } | • Selects all cells within formulas that directly or indirectly refer to the active cells |
| F9 | • Calculate all worksheets |
| Shift + F9 | • Calculate worksheet |
| F2 | • Toggle cell edit mode |

34. KEYBOARD SHORTCUTS (CONTINUED)

Auditing and Calculation keys

- | | |
|----------------------------|---|
| SHIFT+BACKSPACE | <ul style="list-style-type: none">• If multiple cells are selected, select only the active cell |
| SHIFT+PAGE DOWN | <ul style="list-style-type: none">• Extend the selection down one screen |
| SHIFT+PAGE UP | <ul style="list-style-type: none">• Extend the selection up one screen |
| CTRL+SHIFT+SPACEBAR | <ul style="list-style-type: none">• With an object selected, select all objects on a sheet |
| CTRL+6 | <ul style="list-style-type: none">• Alternate between hiding objects, displaying objects, and displaying placeholders for objects |
| CTRL+7 | <ul style="list-style-type: none">• Show or hide the Standard toolbar |

Useful Number formats

- | | |
|--|--|
| ;;; | <ul style="list-style-type: none">• Hides the contents of a cell |
| #, | <ul style="list-style-type: none">• Displays numbers in thousands. (e.g., 1,000,000 displays 1,000) |
| &#,##0.00_);(&#,##0.00) | <ul style="list-style-type: none">• 1000 = &1,000.00 |
| #,##0_);(#,##0);---;•@ | <ul style="list-style-type: none">• -1000 = (&1,000.00)• 1000 = 1,000• -1000 = (1,000) |

34. KEYBOARD SHORTCUTS (CONTINUED)

ASCII Characters

- • Alt + 0149
- £ • Alt + 0163
- ¥ • Alt + 0165
- ™ • Alt + 0153
- © • Alt + 0169
- ¼ • Alt + 0188
- ½ • Alt + 0189
- ¾ • Alt + 0190
- Ctrl + F3 • Define Name (Range Name)

35. FINAL THOUGHTS

- **Structure, structure, structure.** Should know this anyway, since you're ED keeps telling you this every day
- **Keep Inputs, Processing and Outputs** on different worksheets of your Excel file (**IPO** principle)
- **Name universal variables, e.g., WACC** instead of \$AH264
- **Use color-coding, but don't overdo it.** Excel is not a crayon-box.
- **Save cautiously, but frequently.** Keep different versions and backup (network, floppy disk). We've seen too many models disappearing the night before the progress review. The 35 Excel tricks won't help then any more.