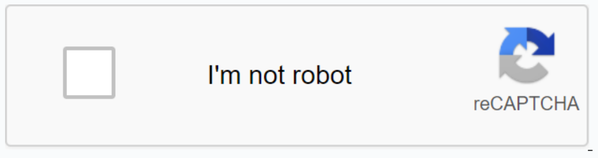

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Make calculations such as numeric, logical and text calculations. 2. Perform data analysis: Excel is used to convert raw data to useful information for decision makers. • Columns are represented by letters • Rows are represented by numbers • Cells are column intersections and rows = names or addresses such as A5 or A1. • Worksket = sheet = all cells. • Sheet Tab = Works sheet name. Workbook = All sheets = files. • Sheet navigation is done using the following: 1. Ctrl + PageDown =expose the next sheet to the right. 2. Ctrl + PageUp =expose the next sheet to the left. 3. Right-click sheet navigation arrow to get a pop-up for sheet name. Keyboard shortcuts are efficient because they help you to get tasks quickly. The Ctrl keyboard is a key you hold together: 1. Ctrl + Arrow: jump to the bottom of the Current Region, which means it jumps into the last cell that has data, exactly the first empty cell. 2. Ctrl + Home = Jump to A1 cell. 3. Ctrl + Final = Go to the last used cell. 4. Ctrl + Shift + Arrow = Highlight column (Current Region). Current). Regions are defined as all data until the first empty cell. 5. SUM: Alt + = 6. Ctrl + Backspace = Jump back to Active Cells. 7. Ctrl + 1 = Cell Format dialog box, or in the chart it opens the Task Pane of Element Chart Format. 8. Ctrl + Z = Undo, Ctrl + Y = Undo, Ctrl + C = Copy, Ctrl + V = Paste, Ctrl + X = Cut. Alt keyboard is a key you press in succession: Page setup: Alt, P, S, P Put things (formula, text, and number) in a cell with: 1. ENTER = Put things in the cell and move the selected cell DOWN. 2. CTRL + ENTER = Place things in the cell and save the selected cell. 3. TAB = Place things in selected cells and move the selected cells TO THE RIGHT. 4. SHIFT + ENTER = Place things in the selected cells and move the selected cells. 5. SHIFT + TAB = Place things in the cell and move the selected left cell. Data Analysis = turns raw data into useful information for decision makers. Business Intelligence = converts raw data into useful/actionable information (often in the form of dashboards) for decision-makers in business situations. Raw Data = data in its restelling form that allows excel Data Analytics features and Excel data analytics techniques to work. Correct Data Set = Correct Table Format = Field Name in the first row and Record in line. Net Raw Data = Fix raw data that cannot be used so that it can be used to perform data analytics. Example: • Remove an unwanted charter. • Add required characters. • Divide data other than the required data. • Join the data together to obtain the desired data. vi. Changing Data Sets = Fix data sets that cannot be used so that they can be used to perform data analytics. Example:? Filter, merge, merge, increase or uninsect data sets. ? Add, remove or filter columns in a data set. vii. Import Data = import data from external sources (one or multiple sources) into Excel Data Model or Power Pivot; optimally, imports will allow a refresh so that when the source data changes the report's output resulting from import action will be updated reflecting changes in the source data. viii. Data Analysis and Business Intelligence Goals: Create useful information, be updated and actionable for decision makers. 8) Correct Data Set, Data Type, Alignment and Excel Table features: Formatare Table Comparable Data Correctly synonymous. The following Excel features do not work correctly unless raw data is stored in the correct Data Set: Sorting, Filtration, Advanced Filtering, Functionality D, PivotTables, Excel Table Features, Power Query, Power Pick and Power BI Desktop. 1. Definitions of The Correct Data Set in Excel: • Field name in the first row. • Records in the next row. • Empty cells, Excel Queues, or Column Heading must be data set. • Default Data Type and Alignment in Excel 2. Default Data types and Alignment in Excel • The numbers are properly supervised. • The text value is slammed left. • Boolean Value (TRUE or FALSE) is a network centre and ALL CAPS. • Error Value is the center aligned. ? Empty Cells. 3. The Default Alignment in Excel provides a visual signal of what type of data it is. If Date, Times or Numbers are slammed left and considered your formulaic text and other Excel features may not work as intended. Example: SUM function can't add Text Number columns. The reasons for that Date, Times or Numbers are slammed left and considered Text: 1. Often Date, Times or Numbers exported from a database or text file are considered text. 2. If you use Text Number Format. 3. Using an apostrophe indicator before Date or Time or Number. 4. Missed typing date or time or number (US system): • 15/2/2016 (no 15th month). • 8:00AM (no space between time and AM). • 20.56 (too many decimals). • Rules for when to manually change alignment: 1. Simply change alignment when you prepare a final report and the data will not be used by formula or feature. 2. Do not change alignment for raw data to be used by formula or other features. 1. What it does: i. Excel Table is considered a database table which means that it has a dynamic range that allows you to add or remove new records or columns to the table and all Formulas, Charts, PivotTables, Power Queries and Power Pivot Data Models will be updated automatically (Pivotables, Power Queries and Power Pivot Data Models require you to click the Refres button). ii. Adding formatting to the entire table. iii. Add sorting and Filter buttons to each field (at the top of each column). 2. How to convert the Correct Data Set to Excel Table: i. With a single cell selected in the Correct Data Set: 1. Insert Ribbon Tab, Table Group, Table Button 2. Keyboard ==> Ctrl + T 3. How to name your Schedule: i. With a single cell in Excel Table: 1. Ribbon Design Tab Table Tool, Property Group, Table Name Text Box. 2. Keyboard: Alt, J, T, A 4. When you highlight the range from Excel Table in your formula or dialog box, the range appears with Table Name and Field Name: Example: if Table Name is Transaction and Field Name is Sales range looks like this: ProdSales[Sales] • The table name appears as the real name: ProdSales. ? The field name is in Square Backup: [Sales]. 5. To add a new record to the table: • Type a new record in the first row below the table. ? In the last cell in the last record in the table, press Tab. 6. To change excel schedule back to non-Excel Table: ? Right-click, Schedule, Switch to Range. 9) Number formatting is Face: i. Number formatting can display the number on the surface of the cells that can differ from the basic numbers sitting inside the cells. ii. The formula makes their calculations on the actual numbers in the cell, rather than the numbers displayed on the surface of the cell. If you are required to round up your number, such as for invoices, salaries, accounting, use the ROUND function (see section later in this document about viewing). Remember: 1. No formula view Number Formatting. 2. What you see on the spreadsheet surface is not always, what is in cell. V. Examples of Number Formatting: 1. General Number Formatting: i. General Number Formatting = What you see is what is cells. ii. If you use General Number Formatting, it will delete all previously used Number Formatting to reveal the numbers that actually sit in cells. Using General Number Formatting DELETEs all Previously used Number Formatting. iii. General Number Formatting is The default Number formatting on all cells. Ctrl + Shift + ~ (') = General Number of Keyboard formatting. 2. Reduce Decimal Number Format: i. A reduced decimal does not remove the basic decimal, but rather, it displays numbers with fewer decimals than the actual numbers sitting in the cell. ii. When you reduce decimals, the amount appears as if it were rounded up, but it wasn't round. If you have invoices, salaries and other numbers that require illing, you must use the ROUND function to round up the numbers to get the correct answer. 3. Accounting Number Format: i. Fixed dollar sign (left edge of the cell). ii. Negative is in bracke. iii. Zero is dying. iv. Decimals always line up. V. When you use accounting Number Format, it may hide decimals by displaying less decimals than actually in cells. This can lead to formula errors due to the fact the formula calculates the basic number and not the number displayed. 4. Currency: i. The dollar sign is floating. ii. You choose how to show negative. iii. Zero is zero. iv. Decimals usually line up. V. When you use currency number format, it may hide decimals by displaying less decimals than actually in cells. This can lead to formula errors due to the fact the formula calculates the basic number and not the number displayed. 5. Date Number Format: i. Enter dates with forward slashes (there are other methods too) such as: 3/30/2016. ii. Under Date Number Format is a Serial Number that represents the number of days since 31 December 1899. 1. Example: Jan 1, 1900 = 1 Jan 2, 1900 = Oct 2, 30, 2013 = 41577 Mar 30 = 42459 iii. Some Mathematical Formula Dates: 1. =End Date – Start Date = Number of Days Between Two Dates (Number of days late invoicing). 2. =End Date – Start Date + 1= Number of Days Between Two Dates Included Start Date (Number of days for a project that includes the start date). 3. = Loan Issue Date + Number of Outstanding Loan Days = Maturity Date. iv. Date/Time Keyboard: 1. Ctrl + ; = Keyboards to encrich today's dates. 2. Ctrl + Shift + ; = Keyboard for the time during hard coding. 6. Time Number Format: i. Enter the hour, colon, minutes, colon, seconds, then space, and AM or PM (there are other methods as well) such as: 8:00 AM. ii. Under Time Number Format is a serial number that represents the proportion of one day 24 hours. 1. Example: 8:00 AM = 8/24 = 1/3 = 0.3333333333333 12:00 PM = 12/324 = 1/2 = 0.5 3:00 PM = (12 + 12 + = 15/24 = 5/8 = 0.625 iii. Some Mathematics Formula Time: 1. =(End Time – Start Time)*24 = Working hours in non-night shifts. 2. =MOD (End Time – Start Time,1)*24 = Working hours on day or night. iv. Date/Time/Time 1. Ctrl + ; = Keyboards to encrich today's dates. 2. Ctrl + Shift + ; = Keyboard for the time during hard coding. 7. Percentage Number formatting: i. What is the percentage? 1. What is the total portion of 100? I. If the tax rate is 9.95%, this means that you will need to pay 9.95 cents from every 100 cents (or one dollar). ii. What is Percentage Number Format: 1. For numbers 0.03, Percentage Number format displays numbers with: i. Decimals wind up two positions on the right and ii. Percentage mark. iii. 0.03 to 3.00% 2. For a tax rate of 1.45%, you need to keep in mind that the base number is 0.0145. 8. Custom Number Format: i. There are four sections for Custom Number Formatting, each separated by semi-colon: <POSITIVE>><NEGATIVE> <ZERO>; &TEXT>ii. In general, in this class we will learn some basic code for Custom Number Formatting and depending on finding the code when we need it. We will learn some types of Basic Custom Number Formatting: 1. Date. 2. Time. 3. Percentage 4. Significant and insignificant decimals. 10) Style formatting allows you to present information in an effective manner. i. Style Formatting involves formatting such as: 1. Bold. 2. Fill in the color. 3. Font Color. 4. Border Alignment. 5. Font Size. 6. Font Type. 7. Wrap words i. Alt + Enter = Add Rest Manual Line (Word Wrap) ii. Style Formatting Guidelines: 1. Use the minimum amount to communicate messages effectively. 2. Consistency. 3. All numbers should have the same number of digits. 4. Units must be indicated either by Number Formatting or Label. iii. Two Schools of Thought for Style Formatting: 1. Minimalism School says: i. Field names or column headers should be bold. ii. Use Number formatting several times. iii. Do not use alignment. iv. The default grey line in a spreadsheet is the only boundary you need. V. Sometimes red is used to show interest. 2. More Than Minimum Schools says: i. Field names or column headers can have A Filling Color and Font Color, but are consistent. ii. Font color and Fill color must have a huge difference in value so that it is easy to read: 1. Dark Blue Fill and White Font Color have a huge difference in value. 2. Red Fill Color and Black Font Color DO NOT have a huge difference in value. Excel Advanced Training for ICPAU in collaboration with Summit Consulting Ltd Contact: Pontian Kay (+256790790707) Page 12 of 156 iii. Use number formatting consistently. iv. Black borders can be okay for data tables. V. Use similar color schemes across tables, charts, PivotTable, Omissions and other objects. iv. Cell Style 1. Allow you to save a set of &Style Formatting; Number and use it as often as you need. 2. Add New Cell Style: i. Add style to cell ii. go to the Styles Set in The Home Reben and click on the Dropdown arrow of Cell Styles or More button and click on New Style. This opens the Styles dialog box. iii. Name style iv. When in the Style dialog box, you can use the Format button to add more styles if you want 3. To use Cell</TEXT> </ZERO> </NEGATIVE> </POSITIVE> </POSITIVE> select the cells and use a new style from the Style group in the Home Ribbon Tab. Advanced Excel Training for ICPAU in partnership with Summit Consulting Ltd Contact: Pontian Kay (+256790790707) Page 13 of 156 11) Page Setup allows you to print information by way of impact i. Page Setup dialog box 1. Open the Page Setup dialog box keyboard = Alt, P, S, P 2. Page Setup dialog box i. Page tab: 1. Orientation: i. Landscape when the table is wider than high. ii. Portrait when it is higher than the wide. 2. Scaling: you can shrink or enlarge how information will appear when it prints out. 3. Fit: i. Allows you to take a table that is slightly larger than the page and shrink it to fit on the page. ii. If you type 1 for a wide page and leave the blank text box (press the delete key) for the high page, the information will always fit a wide page, but it will print as many pages as high as you need. This is great if you have an expanded schedule, or you don't know how many pages are high in information. Margin tab: Set the margin on the edge of each page. Header/Acting Tab: 1. Header 3 part: i. Preview: gives you a preview. ii. Built-in: select from the drop-down list. iii. Custom Headers: Allows you to type headers or choose from several different options (buttons). 2. Footer 3 parts: i. Preview: gives you a preview. ii. Built-in: select from the drop-down list. iii. Custom Scank: Allows you to type a credention or choose from several different options (button). iv. Sheet Tab: 1. Set Print Area: Select only the range you want to print. This is great when you want to exclude data and calculations that are not part of the final report. 2. Columns to repeat on The Left: Prints the highlighted columns on each page. This is great for a large table, such as when you want to repeat the name on the left-hand side of each page. 3. Lines to repeat on Top: Prints the highlighted row at the top of each page. This is great for a large table, such as when you want to repeat the field name at the top of each page. i. Effective: Achieve the stated goals. Example: • Use COUNTIFS to calculate the correct number for how many Ford cars are sold. • Use the correct Number Format to display the same number as the base number in the cell. ii. Efficient: Achieving goals with a minimum number of resources and having an accomplished goal has the ability to adapt to future changes. Examples of tasks that achieve goals with a minimum number of resources (where resources are the time to create solutions) are: i. Use Mixed Cell Reference and COUNTIFS functionality to build a cross-decrypted table with single rather than many formulas. ii. Use keyboard shortcuts to access most tasks, rather than slower methods such as using the Ribbon Tab, Menu or scroll bar. 3. Examples of tasks that achieve the stated goals and have the ability to adapt to future changes are: i. For a formula that calculates tax deductions, you must put tax rates in cells, label them and refer to taxes in the formula with cell references. This way if the tax rate changes, it's easy to update it later. The input of the hard blocking formula into the formula makes it time-consuming and difficult to update the formula later (and #1 causes of spreadsheets). Formula such as: =ROUND (A44*0.0765.2) is very inefficient and error exposed. ii. Formulas such as =SUM(A1:A5) instead of =A1+A2+A3+A4+A5 will be updated if the row is entered on line four. iii. Class Goals: Develop Effective and Efficient Solutions in Excel to Calculate Performing Data Analysis 1. Open a new workbook 2. Select DATA.... Get External Data.... From Text Figure 1: Imports text files 3. In the Import Text File dialog, visit, select and import files from the product sub-folders under the file folder. 4. In the Import Text Wizard that appears (See Figure 2: The Text Import wizard below) leaves the default selection of the selected file type as we import the celebrated tab files (separated). 5. From the imported file preview, you'll also note that the file has a header. For that reason, please check the Data check box I have the header as shown in (Figure 2: Import Wizard Text below) Figure 2: Import Wizard Text 6. Click Next 7. In step 2 of the Wizard, (See Figure 3: Effect selects the correct text), you'll notice that the delimiter tab is checked by default. Please keep it checked since our delimiter is tab Figure 3: Effect of choosing the correct text delimiter 9. Click next 10. In the wizard's final step (See Figure 4: Define the field data format below), we specify the data format for each field. Figure 4: Determining field data format 11. Click Finish We want imported data starting on A1 Cell. If A1 isn't the selected cell, please change it by editing the contents of the box below to match what you see. 12. Click OK We have just completed the procedure for importing text files using Microsoft Excel. When you use a template, all you need to do is replace the information in a work set with your own. They help you save time oodles and keep your work squatters consistent. You can also edit the template, or create your own and then use it again and again. Changing the default workbook template Every time you open an empty workbook in Excel, you open a template -- one in which margins, fonts, and themes have been defined. This is the default template. It's not very fancy because some of the templates you see are portrayed, but it's still a template. You can edit this template the same way you'll edit the fancier template, then save it as a new template. To create a new template, open the workbook (or create a workbook) you want to use as a template. Everything you see or add to a workbook will be part of the template. When you workbook the way you want your template, click File, and then Save As. Select a location to save the workbook, and then choose to save the workbook as an Excel Template. Now when you open open what you need to do is customize it for the new workbook, and then save the new workbook. Select the template you want to use by clicking on it. Click the Create button to create the template. We've selected the Calendar Any Year template and we click Create. Excel loads the template for you. Finding an Excel Template gives you several ways to find the template you want. At the top of the screen (File>New), you'll see this: You can type the type of template you want. Let's say we want a calendar. Type in the calendar. Excel then searches its online database for the calendar template, then shows you the result: On the right, you will see a category window where you can search for calendar templates by category. Just click on the category to see the calendar. Customize the template Let's go back to our Calendar template we showed earlier: Once you open the template, you can now make changes to it. You can change the font size, font color, etc. if you want, and you can also customize the data. To edit the data, click on the cell. It then selects the cell, as shown below. Now just type in the data you want. We can also change the template style. Note below that we have clicked on the cell containing april. Although the cell is selected, you can also look in the Styles gallery to see the style used on it. You can customize the style to change the formatting. Click on any image in the template, and you'll see a bound box appear around it: You can then crop or copy the image. Opening Microsoft's Existing Templates provides several templates to make your work easier. If you have already opened Excel, you can view the template by clicking the File tab, and then going to New. You can then see the template as you did on the start screen. As you can see, a blank workbook template appears first, followed by an Excel 2013/2016 visit. After this, you can see all the templates. Select the template you want to use by clicking on it. EFFICIENCY AND RISK Protecting individual cells In this topic, we see how to lock individual cells in Microsoft Excel working tool. The procedure to use depends on whether you want the majority of cells in the work poem to remain locked or unlocked. NOTE: If you lock cells and protect work sets, then you should not type data into cells, customize existing data in cells, or exchange other cell attributes (such as cell formatting). To unlock individual cells in an Excel work set, use one of the following procedures. To lock the majority of cells in a working poem: Select the cells you want to remain unprotected. To select cells that are not contiguous (not self-aware), press and hold CTRL clicks of cells that remain unregiiled. 1. Show the format cell dialog box by clicking the Expand button to the bottom right of the Home ribbon font section, and then clicking the Protection Tab. Click to clear the Locked checkbox and click OK. 3. Click the Review tab, and and Protect the Sheets. Type a password if you want one, and then click OK. To leave the majority of cells on an unlocked worksheet: Select the entire work sheet by clicking the Select All button (gray rectangle in the upper left corner of the work squatter where the row 1 and title column A meet), or by pressing CTRL+A or CTRL+SHIFT+SPACEBAR. 1. Show the format cell dialog box by clicking the Expand button to the bottom right of the Home ribbon font section, and then clicking the Protection Tab. Click to clear the Locked checkbox and click OK. 2. Select the cells you want to protect. To choose non-adjacent (unconscious) cells, press CTRL directly and click the cells you want to protect. 3. Return to the Format Cell dialog box, and then click the Protection tab. Click to select the Locked checkbox, and then click OK. 4. Click the Review tab, and click Protect Sheets. Type a password, if you want one, and then click OK. Protect the Add protection work set to the work set so that others can't edit it. You can lock a cell or an entire work set. We looked in previous topics on how to lock individual cells. To protect the workshow, go to the Review tab, and then click

Protect Sheets in the Changes group. You can add a password that someone needs to enter to be able to make changes. In the Allow All Users of This Worksheet section, specify what other users CAN do on the work set. Click OK. Protect the workbook Below the Review tab, click Protect Workbook in the Change group. Again, you can add a password. You can protect the workbook for structures or windows. Protecting it for a window prevents anyone from changing the size and position of the window when the workbook opens. Protecting it for structures prevents anyone from seeing the job squatters you've hidden; move, delete, hide, or change the names of work poems; and insert a new set of works or charts, move or copy work caets. If you want to change the look and feel of the table used in the template, you can do so by selecting a table in the template, then using the Format button as Table. You can add a password that someone needs to enter to be able to make changes. In the Allow All Users of This Worksheet section, specify what other users CAN do on the work set. Click OK. Sharing a Workbook You can easily share workbooks without having to send them via email as a huge attachment. To be able to share your workbook with others for review or editing, click the File tab, then click Share. Now, choose how you want to share a workbook. Invite People is a cloud-based sharing. First, save your workbook to your SkyDrive, invite the person you want to be able to see it. Email lets you send files via email using your default e-mail program. You can choose to send it as an attachment, send it as a PDF, as an XPS – or even as a fax. You can save your workbook to a shared location, such as a company server, you can also send a link to a workbook Send Link (above). EXCEL HyPERLINK Creating Hyperlink hyperlinks is a link to a website or location on the Internet – or even your computer, if the person reading your spreadsheet has access to your computer files. To sow hyperlinks into spreadsheets, go to the Ants tab, then group Links. Click the Hyperlinks button. You can also right-click in the cell where you want to sow a link and choose hyperlinks. You'll see this window: In the Text To Display field, enter the text you want displayed in your spreadsheet. This will be the text people can click to take them to the website. It doesn't have to be a URL. You can type the word cow if you wish. Choose what you want to link to. We have chosen a place in the spreadsheet. Click OK when you're done. Erase an object To erase the object into Excel, select the location, then click the Ants tab, then the Object button. The Object dialog box will open. As you can see, you can now choose objects to embed. We'll scroll down and erase wordPad documents. Click OK when you've selected your object. We now have an open WordPad spreadsheet over our spreadsheet. If you look to the right of a WordPad document, you'll see a text box where your text will be placed. Start typing into a WordPad document. When you're done, click the Files tab in a WordPad document. Select Exit and return to the document. Objects are now embedded. You can resize, move, and even format objects. Text Box Sometimes, you don't want to type cells. Maybe you have a picture you need to add a caption, or you want to type the instructions. For things like this, you create a text box to include in the text. Text boxes can easily be moved, resize and re-positioned (along with text inside) to make creating a simple layout. To create a text box, go to the Insert tab and find the Text box button in the Text group. Click the Text Box button. The cursor changes to the down arrow over your spreadsheet. Just click and drag to pull your text box. You don't have to pull it by cell. In other words, you don't have to worry about starting in the top corner of one cell and dragging. You can put it wherever you want. When you stop dragging and dropping your mouse, the cursor will appear in the text box. Enter your text. You can format text in a text box in the same way that you format cells. DATA VERIFICATION 1) Data Authentication means that the correct data goes into cells. 2) Data Authentication feature in the Data Tools group in the Data Ribbon Tab: • Data Verification allows you to choose from a list of rules to limit the type of data that can be included in the cell. • Caveat about adding Data Authentication in a cell. : 1. If the wrong data is incorrectly located CELLS BEFORE you add Data Verification, when you add DV, it will not automatically tell you about the wrong data. I. Unless you are: Data Menu, Data Tools set, Data Authentication, Invalid Data round. Circle. If you Copy and Paste something into a cell that has Data Authentication Rules, copy and Paste actions will overwrite Data Authentication. Data Authentication Dialog Box 1) Keyboard for Data Authentication dialog box: Alt, D, L 2) Data Authentication dialog box looks like this: 3) Allow text box: • Whole Number: 1. Select the comparison operator 2. Set limits • Decimals: 1. Select a comparison operator 2. Set limit • List: 1. Value in the Source text box can: i. Cell range ii. Name defined iii. Range from Excel Table iv. Value typed separately by comma • Date: 1. Select a comparison operator 2. Set limit • Time: 1. Select a comparison operator 2. Set limits • Text length: 1. Select a comparison operator 2. Set limits • Custom: 1. Logical Formula that evaluates true (allowable value) or FALSE (unauthorized value). 4) Input Messages • Text that appears if you click in a cell with DV 5) Error Altering • Stop means you can't violate the rules • Warning gives an option to comply with or don't comply with data verification? Information only provides information without regulatory enforcement. Subsumbnails 6) Indirect Functions take text that represents references and converts them back to reference. Cumulative list of keyboards used under data verification: 1. Esc Keys: i. Turning off BackStage View (such as Print Preview). ii. Closes most dialog boxes. iii. If you are in Edit mode in Cells, Esc will return to what you have in the cell before you put Cells in edit mode. 2. F2 Key = Puts the formula in Edit Mode and shows the rainbow-colored Range slider. 3. SUM Function: Alt + = 4. Ctrl + Shift + Arrow = Highlight columns (Current Region). 5. Ctrl + Backspace = Jump back to Active Cell 6. Ctrl + Z = Undo. 7. Ctrl + Y = Undo. 8. Ctrl + C = Copy. 9. Ctrl + X = Cut. 10. Ctrl + V = Paste. 11. Ctrl + PageDown =expose the next sheet to the right. 12. Ctrl + PageUp =expose the next sheet to the left. 13. Ctrl + 1 = Cell format dialog box, or in the chart it opens the task pane of the format element. 14. Ctrl + Arrow: jumps to the bottom of the Current Region, which means it jumps to the last cell that has data, right before the first empty cell. 15. Ctrl + Home = Go to A1 Cells. 16. Ctrl + Final = Go to the last used cell. 17. Alt keyboard is a key that you press in inheritance. Alt keyboard is a keyboard you can teach yourself by hitting the Alt key and viewing screen tips. I. Create a PivotTable dialog box: Alt, N, V ii. Page Setup dialog box: Alt, P, S, P iii. Keyboard to open the Sort dialog box: Alt, D, S 18) ENTER = When you are in Edit Mode in Cells, it will put things in cells and move the selected cells DOWN. 19) CTRL + = When you are in Edit Mode in Cells, it will put the thing in a cell and save the selected cell. 20) TAB = When you are in the Edit Mode in Cells, it will put things in a cell and move the right selected cell. 21) SHIFT + ENTER = When you are in edit mode in Cells, it will put things in a cell and move the selected cells. 22) SHIFT + TAB = When you are in The Edit Mode in Cells, Cells, will put things in the cell and move the selected cell left. 23) Ctrl + T = Create Excel Tables (with dynamic range) from the Correct Data Set. • Keyboards to name Excel Table: Alt, J, T, A? Tab = Insert Raw Data into Excel Table. 24) Ctrl + Shift + ~ (') = Keyboard Formatting General Number. 25) Ctrl + ; = Keyboards to encrich today's dates. 26) Ctrl + Shift + ; = Keyboard for the time during hard coding. 27) Arrow Keys = If you create a formula, the Arrow keys will hunt for Cell Reference. 28) Ctrl + B = Thick Font 29) Ctrl + * (on Number Pads) or Ctrl + Shift + 8 = Highlight Current Schedule. 30) Alt + Enter = Add Manual Break Line (Word Wrap) 31) Ctrl + P = Print backstage view and Print Preview 32 dialog) F4 Key = If you are in Edit mode when making your formula AND cursor touch specific Cell References, the F4 key will toggle through Different Cell References: i. A1 = Relative ii. $A$1 = Absolute or Locked iii. A$1 = Mixed with Locked Rows (Relatively when you copy across columns AND Locked when you copy rows) iv. $A 1 = Mixed with Locked Columns (Relatively when you copy lines AND Locked when you cross columns) 33) Ctrl + Shift + 4 = Use Currency Number Formatting 34) Tab Keys = When you select Functions from the Drop-Down Functions list, you can choose the function highlighted in blue by using the Tab key. 35) F9 key = To evaluate only one part of the formula while you are in edit mode , highlight part of the formula and press the F9 key. I. If you created Array Constant in your formula: Press F9. ii. If you evaluate the formula elements only to see what parts of the formula look like, REMEMBER: to Undo with Ctrl + Z. 36) Alt, E, A, A = Obviously All (Content and Formatting) 37) Evaluate The Formula One Step on the Time Keyboard: Alt, M, V 38) Keyboard to open the Sort dialog box: Alt, D, S 39) Ctrl + Shift , D, F, F) = Toggle keys for Filter Drop-Down Arrow 40) Ctrl + N = Open New File 41) F12 = Save As (Change File Name, Location, File Type) 42) Import Excel Table into Power Query Editor: Alt, A, P, T 43) Ctrl + 1 (When the chart element in selected): Opens the Task Pane for The F44 Elements Chart) Key F4 = If you're in Edit mode when creating a formula AND your cursor touches A specific Cell Reference , The F4 key will toggle through different Cell References: i. A1 = Relative ii. $A$1 = Absolute or Locked iii. A$1 = Mixed with Locked Rows (Relatively when you copy across columns AND Locked when you copy rows) iv. $A 1 = Mixed with Locked Columns (Relatively as you copy lines AND Locked while you're across columns) 45) Keyboards to open Scenario Manager = Alt, T, E 46) Ctrl + Tab = Toggle between Excel Workbook File Windows 47) + Shift + F3 = Make a Name From Selection 48) Ctrl + F3 = open Name Manager 49) F3 = Paste Name or Name List 50) Alt + F4 = Close Active Window 51) Keys + Up arrow = Maximize Active Window 52) Ctrl + Shift + Enter Enter Keys • Have functional arguments that require it, or • Whether you enter the Resulting Disciplinary into multiple cells simultaneously. 53) Ctrl + / = Highlight array formatting during BERsyarat 1) Conditional formatting for cells within a highlighted range requires a true or FALSE outgoing logical test • TRUE or FALSE • TRUE = Cells get formatting. • FALSE = Cells DO NOT get formatting. 2) Conditional formatting can be applied to cells with: • Built-in features such as: • Contains value • Top 3 value • Above Average • Data Bar • Color Scale (Heat Map) • Icon Logic Formula: 1. Highlight Bar (Record) where the cell contains value. 2. Highlight line (Record) where sales are below average. 3. Highlight Records containing the top 3 values. 4. Overall Format of Columns Based on condition. 5. Format with complex criteria (AND Logical Testing). 6. Format with complex criteria (OR Logical Test). 7. Weekend and Holiday Format. 8. Item format is NOT in List. To use Conditional Formatting: 1) Home Ribbon Tab, Style Group, Conditional Formatting Button: 2) Keyboard: • Keyboards for New Format dialog boxes: Alt, H, D, Enter • Keyboards to get to the Format Values where this formula is true: Alt, H, L, N, PageDown, Built-in Tab features for Conditional Formatting Steps: 1) Highlight cells 2) Home Ribbon Tab, Style Group, Conditional Formatting Button 3) Select Rule 4) Select formatting Built-in Conditional Formatting Options: Logical Formula 1) The Logical Formula is formula replace true or FALSE 2) For Conditional Formatting: • Formatting is used when the formula evaluates: 1. TRUE 2. Any non-zero number • Formatting is NOT Used when the formula evaluates: 1. FALSE 2. Zero 3. Error 3) When you use the Logic Formula to use Conditional formatting: • Formula needs to count in each cell in range? Rules for minimizing calculation times: 1. Select a rapidly calculated formula. 2. Use Help Cells for sub-calculations so that the Conditional Format Logic Formula does not need to run sub-calculations in each cell within the Conditional Formatting range. 4) Array Formula works in the Conditional Formatting dialog box (without using Ctrl + Shift + Enter), but should be avoided if the overall spreadsheet calculation time is an issue. Steps in Establishing Conditional Formatting with Formula: 1) Highlight cell range. Create which cell metal notes are active cells within the highlighted range. (Active cells are light-colored cells.) 2) Open the Conditional Formatting Rule Manager dialog (from the Home Ribbons tab, select the Styles group and then select Manage Rules from conditional formatting drop-down). 3) Open the New Formatting Rules dialog box (by clicking the New Rules button). 4) Select Use Formula to Determine Which Cells to Format from the Select Rule Types list. 5) Click the format value where this formula is the correct text box. 6) Copyright formula from an active cell viewpoint within the highlighted range. That is, building the formula as if you put it into an active cell and then copy it down and over again. Remember, whatever conditional test is that you make must be evaluated for each cell to determine whether each cell in the range gets formatting. So, although the formula doesn't actually get into active cells, the dialog box will copy it along the range in memory as if the formula was inside the cells within a highlighted range. 7) Click the Format button and select any combination of formatting you want from four tabs (Numbers, Fonts, Borders, and Fills). 8) Click OK in the format cell dialog box. 9) Click ok in the new formatting rule dialog box. 10) Click ok in the conditional formatting rule manager dialog box. Conditional formatting is uncertain: it recalculates frequently and can slow down the overall spreadsheet calculation time. 1) Conditional formatting is recalculated for cells that are visible on the screen • The large screen has more cells to calculate than the small screen. • Contributed has more cells to calculate than contributed. • Scrolling up or down causes Conditional formatting to be recalculated. 2) Conditional formatting is recalculated when actions occur such as: • Insert a formula. • Ant columns. • Recalculate with the F9 key. 3) Conditional formatting created with the Logic Formula delays the calculation in two ways: 1. Recalculation (such as scrolling or entering the formula) 2. The formula should calculate before formatting is used. 4) When you use the Logic Formula to use Conditional Formatting: • Quickly select a calculated formula • Use Help Cells for sub-calculations so that the Conditional formatting Logic Formula does not need to run sub-calculations in each cell within the Conditional Formatting range. Example 1: Built-in features: Cells Contain Visual Steps to use Built-in Conditional Formatting Steps: 1) Highlight range and go to the Home Ribbon Tab, Style groups, Conditional Formatting buttons, Highlight Cell Rules, Same with: 2) Insert cells with the criteria into the Same dialog box: 3) You can change the default formatting by clicking the text box with and selecting Custom Format: 4) Results : Example 2: Logical Formula: Highlight Rows (Records) where cells contain value. Visual Steps for Conditional Formatting with Formula. 1) Start by building a Formula in cells to test the TRUES and FALSEs: 2) Highlight the entire range and make sure the active cells are in the upper corner. 3) Home Ribbon Tab, Style Group, Conditional Formatting Button, select New Rules (Keyboard: Alt, H, L, N) 4) In the New Formatting Rules dialog box, select the Use Formula text box to determine which cells to format 5) Create your Logic Formula in the Format text box where this formula is 6) Make sure you click the Format button and add the formatting you want. Example 3: Built-in Features: Below Average Example 4: Built-in Features: Top 3 3 Example 5: Logic Formula: Highlight Records containing the top 3 values Note: LARGE functions do not need to be calculated in each cell within a conditional formatting range. The advantage of using aid cells to calculate sub calculations is that when the spreadsheet recalculates, only one cell needs to calculate the greatest value. Example 6: Built-in features: Data Bar 1) Data Bar creates Insert Bar Chart. • Max = Fastest Bar. • Min = Shortest Bar. 2) Example: Example 7: Built-in features: Color Scale (Heat Map) 1) Color Scale = Position number by color. 2) 3 colors: • Red = bottom 1/3 value, Darkest Red = Min. • White = mid-1/3 value, White = Mid-point (Median). ? Blue = top 1/3 value, Darkest Blue = Max. 3) Example: Example 8: Built-in features: Icon 1) Icon = can divide the number to 3, group (Up, middle, bottom) 2) function SIGN delivers: • Delivers -1 when the number is negative. • Delivers 0 when the number is zero. • Delivers 1 when the number is positive. 3) Example: Example 9: Logical Formula: Format of entire columns based on examples of conditions 10: Logical Formula: Format with complex criteria (AND Logical Tests) 1) AND Logical Tests with FUNCTIONS AND: Example 11: Logical Formula: Formats with complex criteria (OR Tests Logical) 1) OR Logical Test with MATCH function (Is Item in List?): Example 12: Logical Formula: Weekend and Holiday Format 1) function calculated weekday: • (start_date, end_date, weekends, holidays) ? Weekend argument drop-down list: • Usually it will calculate the number of working days between the start and end dates. But if you give it the same start and end date, the function can only deliver either one (1), if it is a working day, or zero (0), if it is a weekend or holiday. 2) Example: ADVANCED EXCEL FUNCTIONS FUNCTION IF Applies To: Excel 2016 Excel 2013 Excel 2010 Excel 2007 Excel Function IF is one of the most popular functions in Excel, and it allows you to make a logical comparison between values and what you expect. In its simplest form, the IF function says: Although in its simplest form, the IF function says: Although the IF (Something Is True, then do something, otherwise do something else) So the IF statement can have two results. The first result is if your comparison is true, the second if your comparison is False. Scenario: Budget and Expenditure =IF(B2>A2,Under Budget, In The Budget)) NESTING IF FUNCTIONS IF MAY have many other IF functions embedded Assume three results in the above example: Under Budget, In The Budget and zero absorption. =IF(B2=0,zero absorption, IF(B2>A2,Under Budget, In Budget)) Description of VLOOKUP Function performs a vertical search by finding a value in the first column of the table and returning the value in the same line in the index number ranking. VLOOKUP is a built-in function in Excel categorized as Search/Reference Function. It can be used as a working veil (WS) function in Excel. As a working angler function, the VLOOKUP function can be inserted as part of a formula in a cell poetry work. In the screenshot above, the Vlooookup function is used to find the salary applied to different cadres as the range I13:K20 and return the cadre budget per branch in the range B3:F21. Syntax The syntax for the VLOOKUP function in Microsoft Excel is: VLOOKUP (value, table, index_number, [approximate_match]) Parameter or Value Argument value to search in the first column of the table. schedule two or more data lanes arranged in ascending order. index_number The Column number in the table from which the match value must be returned. The first lane is 1. approximate_match Options. Enter FALSE to find the right match. Enter TRUE to look for budget resistance. If this parameter is left behind, TRUE is negligent. The HLOOKUP description of the Microsoft Excel HLOOKUP function performs a flat search by searching for values in the top row of a table and returning values in the same column based on index_number. The HLOOKUP function is a built-in function in Excel that is categorized as a Search/Reference Function. It can be used as a working veil (WS) function in Excel. As a working angler function, the HLOOKUP function can be inserted as part of a formula in a work package cell. The cadre menu and their salaries are shown in the screen shot above. Syntax The syntax for the HLOOKUP function in Microsoft Excel is: HLOOKUP (value, table, index_number, [approximate_match]) Parameter or Value Argument value to search in the first row of the table. schedule two or more rows of data arranged in ascending order. index_number The row number in the table where the match value must be returned. The first line is 1. approximate_match Options. Enter FALSE to find the right match. Enter TRUE to look for budget resistance. If this parameter is left behind, TRUE is negligent. Index number may be more appropriately captured using the resistance function. THE MATCH Microsoft Excel Function MATCH match finds values in a range and returns the relative position of the item. The MATCH function is a built-in function in Excel that is categorized as a Search/Reference Function. It can be used as a working veil (WS) function in Excel. As a working angler function, the MATCH function can be included as part of a formula in a work package cell. Matching lanes As can be seen from the screen shot above, Cadre's relative position in the range M12:O12 is 1 while the relative salary position is 3. Line of dressing As can be seen from the screen shot above, the relative position of the Branch Manager in the range A1:A9 is 2 while the relative position of Keldok. The caretaker is 3. Syntax The syntax for the RESISTANCE function in Microsoft Excel is: MATCH (value, range, [match_type]) Parameter or Argument value to search in a range. range of cells containing the value you are looking for. match_type Options. It's the kind of resistance that performed by the function. Possible values are: match_type match_type 1 (default) The MATCH function will find the largest value less than or equal to the value. You should be sure to sort your variety in order to go up. If match_type the parameters are abandoned, it assumes the match_type 1. 0 MATCH function will find the first value equal to the value. Arwah can be compiled into any order. -1 MATCH function will find the affected value greater than or equal to the value. You should be sure to sort your variety in descant order. EXCEL DATA TABLE Data table is a range that evaluates variable changes in a formula. In other words, it's an analysis of what's easy if: how changing the input value changes the results? You can check the odds at a quick glance. (Data table is not the same as the new table feature on the Inserts tab.) Data table of one variable Use data table one variable if you want to see how different values of a variable in one or more formula will change the results of the formula. For example, you can use visible data tables to see how different interest rates affect monthly mortgage payments by using THEPMT functionality. You insert a variable value in a column or row, and the results are displayed in a column or row next to it. The two-variable data table uses a formula that contains two lists of input values. The formula must refer to two different input cells. In the screen shot above, the monthly payments arising from the $500,000 mortgage contracted for 300 months with a prepayment of $200,000 are $4,316.33. The data table is used to analyze how monthly payments change under different scenarios for annual interest rates and repayment periods. The total was between $2,290.43 for 480 months with an interest rate of 5% 12,548.59 for 60 months with an interest rate of 20%. SEARCH GOALS If you have a formula and want to show certain results, but you don't know what input value to change in the formula, then the Excel Goal Search feature is one for you. Imagine calculating the terms of payment by loan. Your PMT formula gives you a total of $4,316.33 but you can only afford a refund of $2,850. You can use Strive Goals to find out what Principals you can borrow based on your $2,850 budget. Go to the Data >>>When analytics>>>As looking for target PMT value input to be included in C15 cells ($2850) and use the goal of finding the number of payment periods (months). On pressing OK, replace the number of months (300) the number of months for repayments required to reduce the PMT value (monthly instalment) to $2850. BOOLEAN LOGIC Named after nineteenth-century mathematician George Boole, logic is an algebra form in which all values are subtracted to whether TRUE or FALSE. Boolean logic is very important for computer science because it corresponds to a two-page remodeling system, where each bit has a value of whether 1 or 0. Most people use the ALL-time IF function, for example to test if one value is greater than another. Other. many times there are easier ways to do it! Let's use Boolean logic instead – it will save you a lot of time and struggle. Boolean logic, or Boolean algebra, is a type of algebra where you are looking for TRUE or FALSE results. Procedures: Create the conditions you want to test whether it's true or false. Such true/false statement may be changed to 1/0 (one or zero) with inserted two negative signs (-) outside the terms as shown in the screenshot below. =--($B$4=H3) Uses Boolean logic in SUMPRODUCT SUMPRODUCT FUNCTION The function of SUMPPRODUCT multiply the cells in the same line over several lines and formulates the product therefore produced. This function multiplies the corresponding components in a given variety, and returns the amount of the product. Syntax SUMPRODUCT (array1,array2,array3,) Array1, array2, array3, is 2 to 255 varieties whose components you want to multiply and then add up. =SUMPRODUCT($B$4:$B$53=H3),$E$4:$E$53) Boolean logic converts branches to 1/0 notation depending on whether the conditions are based on branches in column H and return the total salary budget in column I. OFFSET Returns reference to the range that is the number of bars and columns that are determined by various columns. Returned referrals can be single cells or multiple cells. You can specify the number of rows and the number of columns to be returned. Syntax OFFSET (references, lines, cols, height, width) References from where you want the offset base. References must refer to adjacent cells or cell ranges; otherwise, OFFSET restores #VALUE! error value. Rows are the number of rows, up or down, which you want the top left cell to refer to. Using 5 as a line argument determines that the upper left cell in reference is five rows under reference. The row can be positive (which means under the initial reference) or negative (which means above the initial reference). Cols is the number of columns, left or right, which you want the upper left cell the result to refer to. Using 5 as a flu argument states that the upper left cell in reference is five columns on the right side of the reference. Cols can be positive (which means on the right of the starting reference) or negative (which means on the left of the starting reference). Height is the height, in the number of rows, which you want the reference back to be. Height must be a positive number. Width is width, in the number of columns, which you want to reference back. Width must be a positive number. Application: OffSET function is used for May purposes. In the demonstration below, this function is used for the sales volume of each department. NOTE: The department is the column title, this uses the inefficient/non-disabled SUMPRODUCT and SUMIFS functions without using OFFSET. This is because the functions of SUMPRODUCT and SUMIFS work properly with instead of parallel lanes. =OFFSET($B$4:B39.0,MATCH (J3.$B$3:H3.0)-1) Using the above offset function users can highlight a column and successfully summarize several other columns. Sales of the department can also be concluded annually as shown. SUMPRODUCT (OFFSET($B$4:B39.0,0,MATCH (J11,$B$3:H3.0)-1)-31),-- ($B$4:$B$39=$K$9)) The criteria for years can be enabled by the drop-down option in the K11 cell as shown above. Other protected functions include: • Indirect • Line • Row • Column E X C E E E V V V O T A B E E E Introduction Is amazing how many highly experienced Excel users cannot understand Pivot tables. Many users spend hours creating work sheet-based solutions that can be addressed within seconds using a pif table. This session will empower you with a complete mastery of this important Excel tool. At the end of this session, you'll be able to: • Create a one-dimensional pivot table report • Create pivot table reports collected • Understand pivot table rows and columns • Use external data sources • Use simple filters and arrange levels on pivot tables • Use report filter fields • Use report filter fields to create multiple pages automatically • PivotTable-style table formats • Create custom PivotTable styles • Understand the pivot table report layout • Add/remove subtotals and use pivot table field formatting • Display multiple Summary in single pix table • Add calculated fields to a pix table • Add items calculated to the pix table • Group by Text • Group by Date • Group by numeric value range • Show consecutive data by percentage of volume rather than value • Create a chart Pioneer tables • Multiple pix tables into a work sheet • Add omissions and timelines to the pix table • Associate a omission and timeline for multiple pix tables Creating a pioneer table of dimensions Below is the sample file to be We use in these lessons: This is the type of worksheet that pivot tables can work properly because columns contain repeated data. Sample files containing more than 2,000 sales lines of transaction data listings within 18 months from October 2007 to March 2009 included. You can view from data that the workstation contains order details sold by the DVD wholesaler, along with the title supplied on each order. Order 136438 was placed on 1-Oct-07 and was directed by Silver Screen Video. The order was sold by Frank Lee and there were four items on the order. Two of the bespoke films are in the Drama genre and the other two are in the Biographical and Comedy genres. Businesses may want to ask some questions about sales during this period such as: • What are my sales by Genre? • How many units are sold by each employee? In this lesson, you will use the pipted table answer both questions in less than 10 seconds! 1. Open Transaction-1 from your sample file folder. This work setting contains a large table named Data (see sidebar for more using tables with Pivot Tables). The table looks like a regular range because it has turned off Filter and table style set No. 2. Click anywhere in the table. 3. Click Ants... Schedule... Pif Schedule. (Alt shortcuts, D, P or ALT, N, V) The wizard's first screen appears. Note that, since you click in the table, it has automatically detected the name of the table data. 4. Click the OK button. (Next... Next.... Complete) A blank pivot table is shown on the screen and the PivotTable Field List appears on the right side of the screen. Check the Genre, Qty and Total checkboxes (in that order) on the PivotTable Field List. Just by clicking on three areas you've answered the first question: What's my sales by Genre? 5. The format of the values shown in the C colour of the pivot table so that they show two decimal places with a comma separater. I. Right click on any value in column C. ii. Click Number Format on the shortcut menu. iii. Click Numbers in the Categories list. iv. Click the Use Separation 1000 checkbox. V. Click the OK. Clear all checkboxes and then select the Employee and Qty checkboxes. How many units are sold by each employee? 7. Name the pif table transaction. i Click in The Pixi Table. ii Click PivotTable Tools... Options... PivotTable... The name PivotTable. iii Transaction type into the PivotTable Name box. 8. Name the table of table of tables. 9. Keep your work as a Transaction-2. Pivot Tables, Ranges, Bernama Ranges and Tables You can create pivot Tables associated with Range, Named Range or Table. The disadvantage of the named range is that they only develop and contract when the row is entered or deleted and NOT when the data is added to the end of the range. Fortunately, Excel 2007 has a great new Schedule structure. The table is wonderful to use as a data source for Pif Schedule because it is completely dynamic. Drilling into pious table data Each time Excel shows volume, it is possible to drill down to see the transactions used to calculate the total amount. When you double-click the volume, (such as the sales volume for action movies in C5 cells), an open new work demon shows the source transaction. You will need to manually delete this set of work after viewing the list of transactions. Activates the Pix table table a bit like a chart because you can't work on their design unless it's activated. To activate, you just click anywhere in the pix table. When the pivott table is turned on, the PivotTable Field List appears alongside the PivotTable Tools tab on the Ribbon.Creates a pivot table report collected 1. Open Transaction-2 of your sample file folder (if it hasn't been opened). 2. Select the Pivot Table work set (if it hasn't been selected). 3. Click in the pivot table to show the PivotTable Field List. 4. Click Genre in the PivotTable field list. Each Employee sales per genre is now shown in the report. 5. Add information to the lap table. Click Headers in the PivotTable Field List. The report is now cracking down on sales by Workers, Genres and Headings. 6. Collapse the guideline to show only by Employee. I. Cell right-click A4. The shortcut menu appears. You can also collapse the outline from the fastest Way Ribbon to collapse and expand the outline is to use the right-click method described in the text. It is also possible to do this in a less efficient way using a Ribbon: 1. Click A5 cells. A5 becomes An Active Field. 2. Click: PivotTable Tools... Options... Active Field... Collapse Overall Field ii. Click: Expand/Collapse... Collapse The Whole Field. The Pips schedule collapses to the Workers level. Excel Advanced Training for ICPAU in collaboration with Summit Consulting Ltd Contact: Pontian Kay (+256790790707) Page 72 of 156 Advanced Excel Training for ICPAU in collaboration with Summit Consulting Ltd Contact: Pontian Kay (+2567907907) Page 73 of 156 7 Expand sales and Armstrong to show full details. Click a small sign + on the left of the A5 cell. Sales are extended to show full details of The Dan. 8 sales. Collapse guidelines for sales and by Genre are shown without Title details. I. Cell right-click A6. The shortcut menu appears. ii. Click: Expand/Collapse... Collapse The Whole Field. Pip Table Title Level collapses to show Sales And by Genre but not by Title. 9. Collapse guidelines to only show sales by Employees. Click the small push mark on the left side of the A5 cell. Contract guidelines for showing only employee levels. 10. Keep your work as a Transaction-3. Understanding the rows of Pivot tables and columns 1. Open Transaction-3 of your sample file folder (if it hasn't been opened). 2. Select the Pivot Table work set (if it hasn't been selected). 3. Click in the pivot table to display the List of Pivot Table Fields. At the bottom right of the screen, you can see four windows: Currently, we have three columns in the Line Labels list and one in the Value list. This creates a pix schedule that shows advance sales by Employees, then grouped by genres and then grouped by Titles. 4. Remove genre and Title lines from the Line Labels list. i. Click Genre and then click Remove Fields from the shortcut menu. ii. Click Title and then click Remove Fields from the shortcut menu. 5. Add Genre to pix table as Column Label. Instead of checking the Genre in the PivotTable Field List, you need to drag it from the PivotTable Field List to the Column Labels list below. The pivot table now shows sales for each employee by genre with the genre listed along the top row as a column label: 6. Add the Title field to the Column Labels list. Drag the Title field from the PivotTable Field List to the Column Labels list. Make sure you put the Title under the Genre. Small + marks are now shown next to each genre: 7. Develop and tear down the Action genre. I. Click a small mark + to the left of the Action in the B4 cell. This field evolves to show each in the Action genre: ii. Small click – the sign that has now appeared to the left of Actions in cell B4. This guideline collapses back to the genre stage: 8. Save your work as Transaction-4. Using Use Excel data sources are capable of importing data from various sources such as CSV files (comma separated values). Once the data is imported into the Excel work packet, then it is possible to create a pix table from the work set. It is also possible to use data directly (without first importing it) from external data sources. This is usually a database like Microsoft Access or one of its big brothers; SQL or Oracle servers. The difference between the contact database and excel A contact database (such as the Microsoft Access database) contains several tables accompanied by a relationship. Conceptually, each table is similar to an Excel table but with more sophisticated authentication. In this regard, Excel is a bit like a simple table database. It is the relationship between the tables that make the actual database of relationships. For example, the database used for this lesson has a Director's schedule and a Movie schedule. The relationship between them is defined as: - A director can direct many films but a single film has one, and only one, a director. When this relationship is defined, Access will prevent directors from being deleted if there is any existing relevance to the film. It's a big mistake to store contact data at Excel, rather than in a true contact database. Excel is the most powerful analytical tool in the world, but it's not a database! You can also use data directly from OLAP cubes. Online Analytics Processing Cube (OLAP) lives on an OLAP server and is a special database optimized to report speed. OLAP technology will usually only be used when working with very large business databases. In this lesson, we'll create a work set that analyzes data from the Access database. Important: You may not be able to complete this lesson unless you have Microsoft Access 2007 or a later version installed on your machine. Access is included in the professional version of Office 2007 but, unfortunately, is not a standard version. 1. Open a new blank workbook. 2. Save a new workbook as Movie Details-1. 3. Click Ants... Schedule... PivotTable. The Create PivotTable dialog appears. 4. Create a pivot table using the qryFilmDetails query in the Movie Library Access database as a source of external data. i Click the Use external data source option. ii Click Select Connection... Button. The Existing Connection Dialog appears. iii Click Browse for More Information... Button. iv Navigate to your sample file folder and select the Movie Library Access database file. V. Click the Open button. You are presented with a list of all tables and queries in the database. vi. Click the qryFilmDetails query and then click the OK. vii button. Click the OK. 5 button. Use the pioneer table to display all movie titles, and budget movies. Check the Movie Budget (Millions$) checkbox and the Movie Title checkbox in the PivotTable Field List. A list of movies and budgets is displayed. 6. Save your work (still by name: name: Granules-1). You can also create a pangsi table from the Access database like this: 1. Data ... Get Outdoor Data... Instead of Access. 2. Select the Access database file and then click Open. 3. Select a table or question to use for the data source and click OK. 4. Select PivotTable Report in the Import Data dialog and then click OK. Important: The lap table is not automatically updated when the data source changes until you click: PivotTable Tool ... Options... Data... Refresh the pangsi table will not be updated to reflect changes to the source data (whether it is a work match or an external data source). By default, Excel does not appear to store local copies of data from external data sources. This means you can still use the support table even if the source database is down. If you're working with a very large data set, you can turn off local data storage by shutting down: PivotTable Tool... Options... PivotTable... Options... Data... Save source data with file. Use an easy filter and arrange to the pangsi schedule 1. Open Transaction-4 from your sample file folder 2. Select display Pangsi Schedule 3. Click inside the lap table to display the Pivot Table Field List. 4. Remove genre and header column labels. 5. Click the bottom arrow next to Row Labels in cell A3. Filter options appear. 6. But the pangsi schedule so that only female workers are shown. Slapped a bush box next to each male worker (see sidebar). Note the filter icon in cell A3 indicating that the lap table has been filtered. It's a very long way to filter male workers. In a realworld workbook, you may create a Gender column in the source data containing a value of M or F. You can then filter by gender with a single checkbox. 7. Fill in the worker's name in the Z-A order. At this time, the names were arranged in the order of A-Z. I. Click cell A4. When you click on any worker's name, it makes the Worker field active. ii. Click PivotTable Tools... Options... Fill up... Z-A. The Pangsi schedule is arranged in the Z-A order. 8. Fill in the worker's name by first name. It is not possible to arrange automatically by first name. To do this, we need first name to be a different field for Last Name. If there are many names, we will attend this in the source data by dividing the Worker Name column into two. Since there are only twelve names, it will be faster to compile the list manually. I. Click in cell A4 to make it the active field. ii. Click: PivotTable Tool... Options... Fill up... Fill up. The Type dialog appears. iii. Click the Manual Options button. iv. Click OK. V. Click and drag the border of each Worker's name to move it to the desired position. Locate the four-head arrow cursor shape before clicking the mouse. 9. Remove I. Click the filter button at the top right of the A3 cell. ii. Check the Select All checkbox. iii. Click the button OK. 10. Save your work as a Transaction-5. Filter is not inherited from source data If the data associated with the Pips Table (either the table, range or range named) is named) used for it (or containing a subtotal) this will not be brought forward into the Pivot Table. If you need the same filter in your Pivot table, you must first create a Pivot Table and then use the same filter. Another way to achieve this goal is to copy data (filtered) to a new workstation and to create a Pix Schedule from this real data subset. Using the report filter field In an Earlier version of Excel, a report filter is called Page Fields. 1. Open Transaction-5 of your sample file folder 2. Select the Pivot Table work 3. Drag the Genre field from the PivotTable Field List to the Report Filter list. Note that filters have appeared at the top left of the pif table (in A1 and B1 cells): Filters currently show all sales for all genres. 4. Use the report filter field to display sales for the Comedy genre. I. Click the drop-down list arrow in cell B1. ii. Click Comedy in the drop-down list. iii. Click the OK button. Note that the total value of Qty is now changing to only show the quantity sold in the Comedy genre. 5. Use the report filter field to show sales in the Comedy genre for June 2008. i Drag the Order Date field from the PivotTable Field List to the Report Filter List. ii Click the drop-down arrow in the B2 cell. iii Make sure the Select Multiple Items checkbox is checked. iv Unfill checkbox (All). v Scroll down the list and check all checkboxes June 2008. vi Click the OK. vii button Only items sold in the Comedy genre in June 2008 are now displayed. 6. Keep your work as a Transaction-6. Using the report filter field to automatically create multiple pages In this lesson, we automatically meet the following scenarios: You've been asked to print a sales listing for each employee. This involved printing a total of 24 separate reports. It's simple, but time-consuming, to manually print each sheet. You need to do 24 filters and print operations. Surely there is a better way? Of course there is. We can use report filters to automate the entire task and print all 24 reports in one operation. 1. Open Transaction-6 of your sample file folder 2. Select the Pivot Table work set. 3. Remove all filters. There are quick ways to remove all filters from the pifer table. I. Click in the pix table to activate it. ii: Click: PivotTable Tools... Options... Action... Clear... Clear Filter. 4. Change the fields displayed by the pivot table so that it matches the following: You learn to do this in Lesson: Understand the pivot table rows and columns. Note that fields appear automatically in the Column Labels list when you add more than one field to the Value list. Your pig schedule now looks like this: 5. Make a separate work detailing the sales of each employee. I. Click anywhere in the pix table. ii. Click: PivotTable Tools... Options... PivotTable... Options... Show Report Filter Page... Dialog Show Report Filter Page appears. Because there is only one report filter, there is only one option. If you have a report the filter, you can choose which filter you want to use. iii. Click the OK button. Something amazing prevails! 24heet work is created immediately, one for each worker. Here's a Chuck West sheet: iv. You can see that it contains a copy of the original pangsi table with a filter set for Chuck. 6. Preview all work packages. I. Click on the first worker tab (West, Chuck) ii. Press and hold <Shift > Key. iii. Use the working rim bar button so that the last worker tab (Armstrong, Dan) can be viewed. iv. Click on the last worker tab (Armstrong, Dan). You've now selected all employee work sets (you don't want to print a Lap Table or Data work sheet). v. Click: Office Button... Mold... Mold. Note that active sheets are selected by default. vi. Click the Preview button. vii. Close print preview. 7. Save your work as Multiple Sheets-1. Formatting the pangsi table using the pangsi table style you have learned how to use built-in styles to format Excel tables. PivotTable styles are used in the same way. 1. Open Transaction-6 from your sample file folder. 2. Remove all existing terrain from the lap schedule. A quick way to do this is to drag each terrain from the field selection window to the field list above: 3. Select the terrain shown below. 4. Filter to show only genres: Action, Odyssey and Animation for workers: Chuck West, Julie Spears and Dan Armstrong. You learn how to do this in an earlier lesson 5. Sweep pivottable style: Dark 9. Click: PivotTable Tool... Design... pivotTable style... Dark... Dark Pangsi Style 9. 6. Power Banded Lines and Banded Lanes. i. Bush: PivotTable Tool... Design... PivotTable Style Options... Kugiran's line. ii. Check: PivotTable Tool... Design... PivotTable Style Options... I've got a pole. The lap table changes to show the colored lines separating each row and column. Two other options in the PivotTable Styles selection set are Row Header and Column Header. In Dark style 9, the column header is shown in different colors. The Column Header check box lets you turn off this color. Some other design. It also shows the row header (cells A6:A8) in different colors. If you're using this type of design, you can turn this color off with the Line Header check box. 7. Save your work as Transaction-7. Create custom lap table styles In Lessons: Create custom table styles; you learn how to create custom styles for Excel tables. Custom PivotTable styles are used in the same way. 1. Open Transaction-7 from your sample file folder 2. Remove the existing style. I. Click the lap table to activate it. ii. Click PivotTable Tools... Design... pivotTable style... Light... No. Note that this style from the default style. The default pix table style is Light 16. 3. Create a custom pixic table style called Corporate by creating a stylishly built Medium8 rotation. You'll usually find that modifying existing styles is easier than creating styles from </Shift> </Shift> I. Right click on: PivotTable Tools... Design... PivotTable Style... Simple... Cross-Style Medium8 ii. Click Tired... from the shortcut menu. iii. Quick Style Modify Pixi Table Dialog appears. Note that some Table Elements are shown in the bold face. These are the elements that have formatted being used for them: iv. Type the Corporate name into the Name text box. V. Click the OK button to reject the dialog. 4. Apply a new corporate style to the pig table. i. Click: PivotTable Tools... Design... PivotTable Style... Custom... Corporate. 5. Modify the Corporate style so that it shows the Grand Total column in the thick. I. Right click on: PivotTable Tools... Design... PivotTable Style... Custom... Corporate. ii. Click Modify... from the shortcut menu. iii. Select the Grand Total Column from the Table Elements list. iv. Click the Format v. Select the Fonts tab. Choose Font Style: Brave. vii. Click the OK. viii button. Click the OK button again. The Grand Total column is now shown in a bold face. 6. Keep your work as Transaction-8. Pixia Table Layout 1. Open Transactions-8 from your sample file folder 2. Remove all existing fields from the pivot table by dragging them into the PivotTable Field List. It's important to realize that when you drag the field back to the PivotTable Field List, you don't clear any filter conditions associated with the field. You can still see the filter icon next to each filtered field (see below). 3. Select the fields shown below. You learn how to do this in Lessons: Understand pivot table rows and columns. 4. Expand the Employee field to also display the Genre. You learn how to do this in Lesson: Create a collected pif table report. The pipsy table is shown in compact form layout. This is the default layout. This layout is useful when you need a report to take up a minimum amount of space on the screen or paper. The subsidiary field is only slightly indented from their master field. 5. Change the report layout to guideline form. Click: PivotTable Tools... Design... Layout... Report Layout... Show in form Guidelines is the default classic pix table layout in the Previous version of Excel. It takes up more space but is easier to read because each field has its own column label. 6. Change the report layout to the Tabular Form. Click: PivotTable Tools... Design... Layout... Report Layout... Show in the Tabular Shape This layout is very easy to read because it is similar to an Excel table common with the amount shown at the bottom of each column. 7. Keep your work as a Transaction-9. Using formatting for pivot table field 1. Open Transaction-9 from your sample file folder (if it hasn't been opened). 2. Use Filters to show only genres and Thriller. You learn to do this in Lessons: Use an easy filter and fill it into the pangsi schedule. 3. Add the Header field to the pangsi table as the third rank row label. Drag the Header field from the PivotTable Field List to the Row Labels list. 4. Develop all Genre fields to show all Headings. Header. learn to do this in Lessons: Create a report on the table of laps collected. Because the set of lap schedules is set to Tabular Form, subtotals are displayed by all groups of subsidiaries. Both Workers and Genres show subtotals. 5. Format genre subtotal fields using Total cell style. I. Tuding the mouse cursor on the left edge of the Total Biography label in cell B9. ii. Make sure you see the shape of the black arrow cursor and then click Transaction-9 to select. Note that when you select a field all subtotal cells of the Genre are selected. iii. Click: Home... Style... Cell Style... Amount. iv. Number of styles used for all Genre subtotal fields. 6. Remove the Genre subtotal. I. Right-click any Genre in column B. ii. Click Subtotal Genre on the shortcut menu. Genre subtotal field is ejected. 7. Spend a Large Amount. i. Click: PivotTable Tool... Design... Arrange... Big amount. ii. Select Off for Rows and Rows. 8. Save your work as Transaction-10. Displaying multiple summaries in a pangsi table it is possible to show the same Value field many times in the same lap table. This is useful when you need to display different summaries (such as Average, Sum and Sum) on a single lap table. 1. Open Transaction-10 from your sample file folder (if it has not been opened). 2. Remove the Genre and Header fields from the Row Labels list. 3. Add two more Sum fields to the Values list. 4. Exchange the new amount to indicate the average sales and maximum sales for each worker. I. Right-click anywhere in column C in the lap table. ii. Click Value Field Set... on the shortcut menu. iii. Select Average in the Quick Value field according to the list. iv. Click the OK button. V. Use the same technique to make the Total Number field3 display the maximum value (Max). 5. Total Medan Average Format2 so that it exposes two tithing places. I. Right-click anywhere in column C in the lap table. ii. Click Number Format... on the shortcut menu. iii. Select the Number category with two tithing places. iv. Click the OK button. 6. Add Large Amount i. Click: PivotTable Tool... Design... Arrange... Big Amount... Rows and Lanes. 7. Save your work as Transaction-11. Turn large amounts on and off with the right-click method In this lesson, you use Reben to allow or weaken grand totals. It is also possible to do this more quickly using the following right-click method: 1. Right click anywhere in the support table. 2. Click PivotTable Options from the shortcut menu. 3. Click the Number & Filter. 4. Click one, or both boxes of Grand Totals bush to enable/qualify. Add the calculated terrain to the pangsi schedule 1. Open Transaction-11 from your sample file folder 2. Spend Average Amount2 and Maximum Field Total3. You learn how to do this in Understand pivot table rows and columns. 3. Total field volume format to show a comma of thousands of separatists. I. Right click anywhere in column B in the pif table. ii. Click Number on the shortcut menu. iii. Click the Numbers category. iv. Check the Use Split 1000 (,) checkbox. V. Click OK. 4. Add a calculated field called Bonus that will calculate 3% of the total sales. i. Click: PivotTable Tools... Options... Tools... Formula... Calculated Field... ii. Type Bonus in the Name text box. vii. Click in the Formula text box and remove zero, just leave the mark =. viii. Select Volume in the Fields list and then click the Fields Insert button. ix. Total words are added to the Formula. vi. Type to complete the formula vii. Click the OK. New field called Bonus has now appeared in the PivotTable Field List and the Bonus Volume field has appeared in column C. 5. Change the name at the top of column B and C to Fair Sales and Bonuses. I. Click B5 cell. ii. Type a new name sales. iii. Press &Enter> key. Use the same technique to change the name in the C5 cell to the Due Bonus. 6. Remove Field Header (this is shown in line 4). i. Click: PivotTable Tools... Options... Show/Hide... Field header. Three items in the Show/Hide group are toggle buttons that allow you to add and remove different pix table artifacts. Pivot tables are now well formatted. The Value Label has been lost but the same goes for the Employee label. If you want to save the Employee label, you'll need to hide row 4 instead (See tips below). Hiding pivot table rows In these lessons, we turn off field headers to block Value labels in B4 cells. This has side effects also removed the employee's word from the A5 cell. If you want to save employee labels but block Value labels, you'll need to hide line 4. To hide the row, right-click the line header (number 4 on the left side of the row) and then click Hide from the shortcut menu. 7. Save your work as Transaction-12. Adding items calculated to the pix table A field usually consists of several items. For example, the Genre field consists of items such as Drama, Comedy, Actions, Biographies etc. If you want to show a Sales sales target + 10%, you'll only make a calculated field. Sometimes, you'll want to do a calculation when the number of items is selected in the field. In this example of lessons, you're interested in sales volume for the Drama, Comedy and Action genres, because they're your top sellers. Calculated items provide solutions to this problem. In this lesson, we'll add calculated items to find sales volume in this genre. 1. Open Transaction-12 of your sample file folder (if it hasn't been opened). 2. Clear all filters from the piptcy table. Click: PivotTable Tools... Options... Action... Clear... Clear Filter. 3. Remove all existing fields from the pix table and replace it with the following: 4. Total Format to show two decimal places a thousand separatists. I. Right click anywhere in column B in the pif table. ii. Click Number Format... on the shortcut menu. iii. Click the Numbers category. iv. Check Usage 1000 </Enter> </Enter> (,) checkbox. v. Click OK. Your pix schedule now looks as shown below. 5. Add calculated items to show sales volume for the genre: Drama, Comedy and Action. I. Click any pix table cell in colon A. II. Click: PivotTable Tools... Options... Tools... Formula... Calculated Items... Calculated Items' Dialog appears. This is very similar to the Silent Calculated Field dialogue. The dialog is misleading because it shows many fields and items that won't be valid for genre fields. They are not grey, as you might expect. iii. Name a calculated item Drama, Comedy & Action. Select the Genre field and Drama items and then click the Item Ants button. Formula changes to include Drama items. V. Type a + operator into the formula. vi. Add Comedy and Action items in the same way so that your formula is the following: vii. Click the OK. A number button for Drama, Comedy & Actions appear at the bottom of the pif table. Note that this addition has damaged large Quank as Drama, Comedy and Action are included in the Grand Total twice. 6. Filter individual Drama, Comedy, and Action fields so that they are no longer shown or included in the Grand Total. Because Field Heading is turned off at this time, you can't use filters. i. Click: PivotTable Tools... Options... Show/Hide... Field header. ii. Genre field headers appear in A4 cells. X. Click the drop-down arrow to the right of the A4 cell. xi. Remove individual Drama, Comedy, and Action items by decompressing their checkboxes. V. Large numbers are now correct. 7. Keep your work as Transaction-13. Collect by Text In Lessons: Add calculated items to the pix table, we use calculated items to show the number of groups for the Action, Comedy & Drama. Another solution to this problem is to create a group for these three genres. The pif table can then show the number of groups. We will push things further, in this lesson, by putting each genre into three groups: • Action, Comedy & Drama • Crime, Biography & Fantasy • Adventure, Sci Fi, Thriller & Animation 1. Open Transactions-13 from your sample file folder 2. Remove all existing fields and filters from the pix schedule (including items calculated added in the last lesson). You often want to remove all fields and filters from your pix table to restart. To do this, click: PivotTable Tools... Options... Action... Clear... Clear All 3. Add the following fields to the pix table. 4. Qty Field Volume format so that it shows 0 decimal places and coma separations for thousands. I. Right click anywhere in colon B in the pif table. II. Click Number Format... on the shortcut menu. III. Click the Numbers category. IV. Select Number and set 0 decimal places with a thousand separatists. V. Click the OK. Add groups to the Action, Comedy and Drama genres. I. Click on the Drama field in colon A (A11 cell). II. Press continue <Ctrl> key and then click on </Ctrl> </Ctrl> (A9) and Action Field (A5) in colony A. Cell A11, A9 and A5 are now selected. iii. Right-click on any selected field and click Group in the shortcut menu. Fields collected: 6. Convert Genre2 labels to Categories and Group1 labels to Actions, Comedies & Drama. The default name is not very descriptive. One click (be careful not to double-click) on each field (A4 and A5 cells) and then type a new label. 7. Create Crime, Biography & Fantasy and Adventure, Sci Fi, Thriller & Group animations. Do this the same way. (This time you will select the Genre in column B). 8. AutoSize column A and collapse all categories. This is covered in Lessons: Create a collected pif table report. Your pioneer table should look like this: 9. Add a subtotal for each group. I. Right click anywhere in column A in the pif table. ii. Click Field Settings from the shortcut menu. Field Settings Dialog appears. iii. Click the automatic selection button in the Subtotals section. iv. Click OK. v. Expand category groups. Subtotal is shown for each defined group. 10. Keep your work as a Transaction-14. Accumulation by date of Excel's ability to summarize transaction data by monthly volume is very difficult to achieve without a pif schedule. In an earlier version of Excel, this feature is so hidden that most Excel users do not know there. Things are a little better with the new Ribbon interface. 1. Open Transaction-14 from your sample file folder. 2. Remove all existing fields from the pioneer table. You often want to remove all fields and filters from your pix table to restart. To do this, click: PivotTable Tools ... Options... Action... Clear... Clear All 3. Add the following fields to the pix table. Sales are now shown for each employee and for each date. Sales are summarized by day but are more likely that you will want to show sales by week, month, quarter or year. 4. Show monthly sales for each employee. I. Right-click on any consecutive date 5. ii. Click Group on the shortcut menu. The Group Dialog appears. iii. Select Month and Year. When you accumulate by month, be careful that you also accumulate by year. If you don't, you'll get October 2007, 2008 and 2009 grouped into one total! Groups use Ribbons In these lessons, we use right-click methods to display Group dialogs for group fields. It is also possible to do this using ribbons but it is a little bit more involved and requires more clicks. 1. Click the Order Date field to make it An Active Field. 2. Click: PivotTable Tools... Options... Group... Groups Fields. The Group dialog is then displayed. iv. Click the OK. V. Pivot table is now grouped by year and by year 5. Collapse the pangsi schedule to show sales by year. I. Right-click cell B5 to display the shortcut menu for the Year field. ii. Click: Develop/Collapse... Collapsed All over Medan. Sales are now displayed by year. 6. Develop the lap to demonstrate sales by month and year. I. Right-click cell B5 to display the shortcut menu for the Year field. ii. Click: Expand/Collapse... Expand The Entire Field. Sales are now displayed by month and year 7. Apply for a filter to show sales for Jan, Feb and March 2009. I. Select Q5:S6 cell. Make sure you include the year (Q5) otherwise; you will see sales for Jan/Feb/March 2008 and 2009. ii. Right-click the selected cells. iii. Click: Filter... Saves Only Selected Items on the shortcut menu. iv. Scroll the screen left so you can see column A. 8. Save your work as Transaction-15. Group according to the probability value 1. Open the Employee-1 Age Profile from your sample file folder. 2. Convert the A3:C27 range into a table named Data. In Excel 2007, it is best practice for the base of the pix table on the table (we will use the range named in the previous version of Excel). i Click anywhere in the A3:C27 range. ii Click: Hide... Schedule... Schedule. iii Click OK. iv Type the Data name into: Table tool... Design... Property... Table 3 name. Create a pix table from the Data table. i Click anywhere in the table. ii Click: Hide... Schedule... PivotTable. iii Click OK. 4. Add the following field to the pix table: (The command is important. Age must come before Name). The pif table now owes employees by age. Where two employees are of the same age, they are grouped together. The challenge for this lesson is for groups of employees into bands of different ages. 5. Group of pif tables into age strips: Under 25, 25-34, 35-45 and Over 45. i Right-click any age in column A (for example: A6 cells). ii Click Group from the shortcut menu. The Group dialog is displayed. iii Type the following values into dialogs: This tells Excel for the group into age: 1. Less than 25 2. between 25 and 45 in the group 10 years 3. More than 45 iv. Click the OK. Age button is now grouped as defined: 6. Change the Line Label label in an A3 cell to Age Group. I. Click once on a A3 cell. ii. Type the Age Group into a cell. iii. Press &Enter> key. 7. Save your work as Employee Age Profile 2. Displaying row data by percentage of volume In this lesson, we want to find which genre is most suitable for sale. This will allow companies to allocate sales indicators for each genre to the most competent salespeaders in the genre. This time we are not interested in sales volume but the percentage of sales follows the genre for each employee. As a bonus, we will see the market share of each genre percentage. 1. Open Transaction-15 from your sample file folder 2. Remove all existing fields and filters from the pix schedule (including items calculated added in the last lesson). You often want to remove all fields and filters from your pix table to originally. To do this, click: PivotTable Tools... Options... Action... Clear... Clear All 3. Add the following terrain to the pangsi table. 4. Format the Number of Field Amounts to indicate two places of tithes and a thousand separators. Sales are now shown for each worker and for each genre. 5. </Enter> </Enter> sales value as a percentage per line of volume. I. Right click on any numeric value in the pif table. ii. Click the Value Field settings in the shortcut menu. Value Field Settings dialog is displayed. iii. Click Show Value as tab. iv. Select % rows in the Show values list as a drop-down list. V. Click the OK button. Value is now shown as a percentage of each employee's sales: you can see at a glance that Alfred Hawking is doing well with sales in the Action genre, and Paul Goodman is our star performer in the Drama genre. We should keep Michael Hicks and Julie Spears away from science fiction sales! 6. Keep your work as a Transaction-16. Creating a pioneer chart from the pioneer table this Specialist Skills Course assumes that you already understand the regular Excel chart. When you create a pifire chart from a pix table, it is important to realize that the chart always matches the data shown in the pix table. You make changes to the chart source data by modifying the pivot table that supports it. 1. Open Transaction-16 from your sample file folder. 2. Change the total field amount so that it displays the cash value rather than the percentage of the total. I. Right click on any percentage value in the pif table. ii. Click the Value Field settings in the shortcut menu. Value Field Settings dialog is displayed. iii. Click Show Value as tab. iv. Select Normal from the drop-down list. V. Click the OK. Filter the pious table so sales are only shown for three employees: Jane Anderson, Dan, Armstrong and Lucille Ashe. 4. Filter pix tables so sales are only shown for three categories: Action, Comedy and Crime. 5. Create a Group Column pix chart from the pix table. I. Click anywhere in the pix table to activate it. ii. Click: PivotTable Tools... Options... Tools... PivotChart. iii. Click Group Column Chart type. iv. Click the OK button. The clustered column chart is shown embedded in the workpox. Although this is sometimes what you want, most of the time you will want to put your chart into your own work charge (see note below). 6. Move the chart into his own work unplug. I. Click on the chart to activate it. ii. Click: PivotChart Tools... Design... Location... Move the chart. iii. The Transfer chart dialog appears. iv. Complete the following dialogue: v. Click the OK button. Chart now stays in its own chart sheet. 7. Keep your work as Transaction-17. Enter the slices and timeline now, let us add new relics and timelines. To do so, click in PivotTable and click the Contextual Analytics tab. In the Filters group, click Ants omissions. The resulting dialogue will display a date field. Check it out, as shown below, and click OK. Use omissions and timelines along with new omissions, you can data quickly by category, employee, genre and date. To see how this works, check out the comedy in the slicer. Then, click September and October 2013. The numbers below show — a single record for only comedy even if another record exists for other months. You can add slicer for each field, if doing so makes sense. The advantages of placing a chart on the sheets of the chart 1. They are easier to find, because you can give each sheet a meaningful name. 2. They are easier to see, since charts usually take the entire screen. You can re-target the chart on a chart sheet but this is not often done. 3. They are easier to print, because you can simply click on the sheet tab and print. You can also print embedded charts in isolation, but to do so you must first search and activate the chart. The advantages of tying the chart in the work charge 1. You can print charts and work squatter data on the same page. If you don't need to print workshow squares alongside your chart, it's best to place your chart on the chart sheet. INTRODUCTION TO MACROS 1) Code in Excel is called VBA (Visual Basic for applications) • Macro is synonymous for VBA • VBA = Visual Basic Application = Macro = written code executing orders to do something (manipulating objects) in Excel. 2) If you do not know how to write a code, you can use the Macro Recorder. ? When you press the Macro Record button as seen in the figure below: 1. It is like a tape recorder 2. Whatever you do in Excel, Macro Recorder writes VBA Code for you. 3) The code is good for two reasons: 1. If you have a recurring task that you want to automate (such as formatting a monthly report). That way you can simply click the button and report formatted 2. There are a few things you want to do (such as having a word-spelling function), that the command in the ribbon can not do. 4) You must use a .xlsm connection to use Macros. 1. File extension: use .xlsm. m means Macro 2. Xlsx file extensions won't allow Macros. 3. In Excel 2003, the .xls file extension works with the VBA or without a VBA. 5) To have full access to features for Macro Recorder, we must present the Developer Ribbon. ? Right-click ribbons, Customize Ribbons, checkboxes for Developers tab. 6) To turn on Macro Recorder • To turn on Macro Recorder using record macro buttons in the Code group in the developer's Ribbon (or macro Records button on the left side of the Status Bar). • Make sure you turn off Macro Recorder when you finish 7) Relative/Absolute Button: • Button Use Relative Reference in the Code Group in the Developer Ribbon. The Use Relative Reference button is a toggle that switches between Absolution and Relative References. When the button is yellow/orange, Marco is recording a Relative Cell Reference in Macro. When it is not yellow/orange, it is recording an Absolute Reference. • Relative Macro records relative movement of selected cells (OFFSET functions). • Macro records the absolute movement of selected cells (RANGE functionality). 8) Safety Level: ? You must also set the security level in the Code Group in the Developer Ribbon to Disable all Macroes with notifications; then every time open the workbook, click the Options button that appears when you open the workbook, then click Enable. 9) Keyboard: • Alt + F11: opens the VBA Editor Window so you can write the code. • Alt + F8: Opens a macro list that you can run. • In the VBA editor: 1. Ctrl + R = Project Explorer 2. F4 = Properties Pane. 3. Alt, I, M = New Module Ant 10) Where to keep your Macro: • If you keep Macro in this workbook, they are only available in this workbook • If you keep Macros in a personal workbook, they are stored in a hidden workbook named Personal and Macros will be available in all the workbooks on your computer. To edit Macro in a Personal workbook, you must uninsemble a workbook using the Uninspiring button in the Window Group on the Display Ribbon. Ribbon.