

## PA Hub

# **Dashboard Presentation**

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### **Named Ranges**

### **Overview**

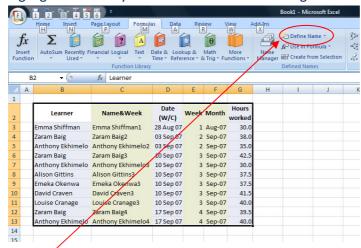
Naming a range is a useful tool for visual purposes, as it makes formula's more concise

i.e. One word will appear in a formula, as opposed to a sheet name and cell reference.

They can also prevent errors if the data range is used in many places, by allowing all references to be updated once, as opposed to individually.

i.e. If you have 10 pivot tables relating to one sheet of data and you add 2 rows of data, you will need to manually amend the range within each of the 10 pivot tables. However, with a 'Named Range', you would update the range once, and each of the pivot tables would automatically update.

### To Name a Range:



• Highlight data that you want to include in the range

- From the menu at the top, choose
  - o Formula
  - o Define Name



New Name			? <mark>X</mark>
Name:	Learner		
Scope:	Workbook	•	
Comment:			*
Refers to:			
<u>R</u> efers to:	=Sheet1!\$		
		ОК	Cancel
		and the second	

- Name the Range, i.e. Learner
- Click OK.

### To update a previously Named Range:

- From the menu at the top, choose
  - o Formula
  - Name Manager
- This will show a list of all of the 'Named Ranges', in this instance, there is only the one we have created.

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fers to:					
	et1!\$B\$2:\$G\$13				
	eet1!\$8\$2:\$G\$13			Close	

- Make any changes manually into this box, or use the browse button to select the range.
- Then click on the tick to save your changes, and then click Close
- Note: You must click on the Named Range that you want to change, from the above list (if there is a list!)



### **Pivot Tables**

### **Overview**

A Pivot Table is used to consolidate a large set of data, in order to summarise the data in a meaningful way.

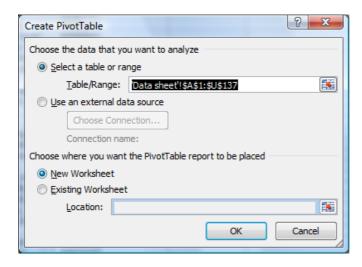
### Method

There are several Steps to follow to create a Pivot Table:

- 1. Ensure that the data range does not contain any blank Columns / Rows or 'Titles'.
- 2. Highlight all of the data in the range.
- 3. From the 'Insert' Menu, select 'Pivot Table'



4. The next menu will ask you to define the data range to be used. This should be the range you have just highlighted, so click 'OK'.

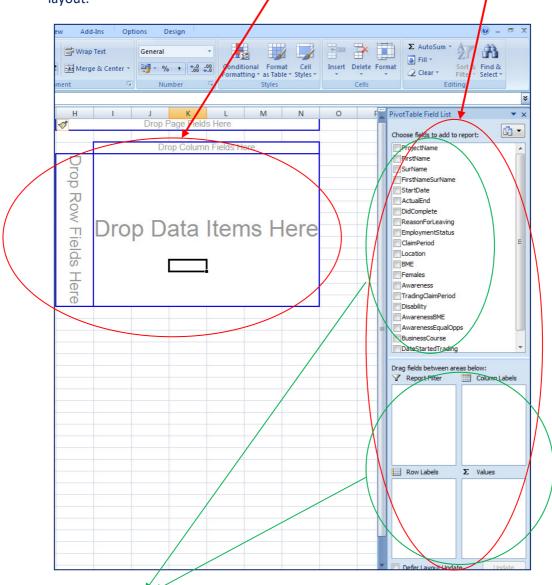


Pivot Tables can also use 'Name Ranges' as the basis of information, these will be covered later. These are particularly useful if you have several Pivot Tables that are using the same set of data as their basis.



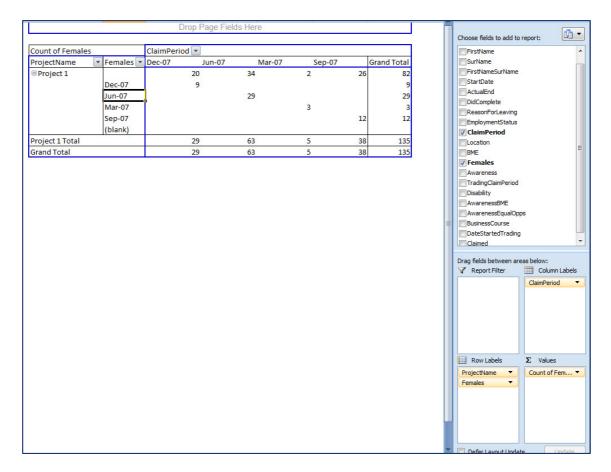


5. The next screen will show you the layout of the pivot table, and the options for creating the layout.



- Each of these items, represents a column from the original data source
- As these items are selected (drag and drop from the list, into one of the four boxes below), the pivot table on the left will become populated with data, so you can preview the report, as follows:





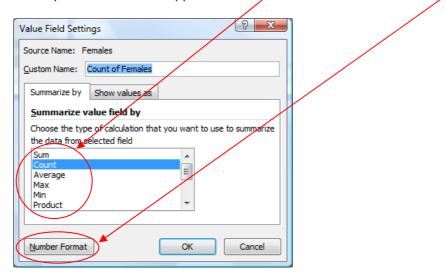
- This report now shows the number of females, by Claim Period, by Project.
- If 'Project Name' had been placed in the 'Column' box, instead of the 'Row' box, there would be a column showing each project.
- 6. As items are placed in the 'Values' box, Excel automatically selects an option by which to calculate the data. In this instance it has chosen 'Count of', which is appropriate in this case, as we want to count how many females have been included. If this needs to be amended, you should take the following steps:



• 'Left' click on the line 'Count of Females'



- Select 'Value Field Settings' from the Menu that appears.
- Here you can select the most appropriate calculation measure, and also format the way that the data will appear.





### **Column Order**

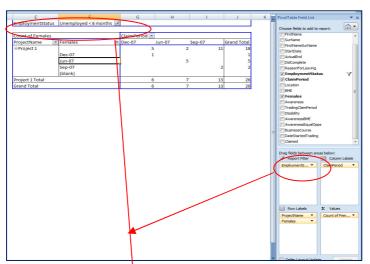
You will have noticed that the columns do not appear in the most appropriate 'Date' order. To correct this, you should:

- Place the cursor within the cell of the title of the column that you wish to move.
- Position the cursor on the bottom line of the cell, until the cursor looks like this:

• Hold down the left mouse button, and drag the column into the required position. This method can also be used to correct the order of items in rows.

### **Report Filter**

Any item that is placed in the 'Report Filter' area, will provide a drop down selection that you will be able to control on the face of the Pivot Table, as follows:



• In this instance 'Employment Status' has been placed into this area, so the report can now be narrowed down to one particular status, by selecting from the drop down box on the pivot table.



### Formatting

Excel 2007 provides a really simple way of formatting a Pivot Table. When you place the cursor within the Pivot Table, you will notice that the 'Field List' appears on the right, and also two new menu options appear at the top of the screen:

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	Home	Insert	Page Layout	Formulas	Data	Review	View	Add-Ins	(	Options	Design	$\mathcal{I}$	
Norn		Page Break Preview	Custom Full Views Screen	Ruler Gridlines Message B		Formula Bar Headings	<b>Q</b> Zoom	100% Zoo	om to	New Window	Arrange	Freeze Panes *	
	٧	Vorkbook Vie	ews	Sh	ow/Hid	e		Zoom					

To format a pivot table you should choose:

- Design, Pivot Table Styles.
- As you move the cursor across each of these options, your pivot table will reflect each design, to help you to decide which one to select.

### **Updating the Pivot Table**

When additional data is included into the data source, you will need to update the range of data that the Pivot Table is using, as follows:

- Using the additional Pivot Table Menu's, as described above (Section 9)
- Select, Options, Change Data Source.
- This will take you back to the screen shown in Section 4, where the data range is detailed.

Change PivotTable Data Source
Choose the data that you want to analyze
Select a table or range
Table/Range: Data sheet'!\$A\$1:\$U\$137
Use an external data source
Choose Connection
Connection name:
OK Cancel

• You will need to key into this box the updated range details, e.g. If the data is now populated up to Row 167, you will need to change the range as follows:

Change PivotTable Data	Source ? X							
Choose the data that you								
<u>S</u> elect a table or range								
<u>T</u> able/Range:	Table/Range: 'Data sheet'!\$A\$1:\$U\$167							
🔘 Use an external dat	a source							
Choose Conne	ction							
Connection nam	e:							
	OK Cancel							

• The Pivot table will now include any new data that has been included within this range.



### **Refreshing Data**

If existing data is amended within the 'Data Sheet', you will need to 'Refresh' data within the Pivot Table, in order for it to represent the changes:

- Position the cursor within the Pivot Table
- Right Click mouse
- Select 'Refresh'

#### Pivot Table & Named Ranges

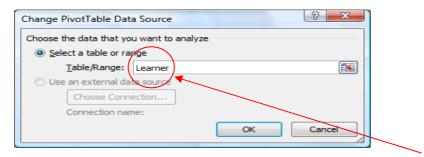
To view the Range that a Pivot Table is using:

• When your cursor is positioned within the Pivot Table and you will see an additional menu in Excel:

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Anthony	Ekhimelo	105					/								
David Cra	aven	41.5					/								
Emeka O		37.5													
B Emma Sh	iffman	30													
E Louise C		40													
0 Zaram Ba		120				_/									
1 Grand To	otal	411.5				/									
2						/									

### • Using this menu, choose:

o 'Change Data Source' icon, and 'Change Data Source' from list



• The above screen will show you either the Name of the Range being used (or the name of the sheet and cells being used, if a Named Range has not been selected.



### **Trouble Shooting Pivot Tables**

Q: Data I've added does not appear in the Pivot Table.

- 1. Refresh Data in Pivot Table.
- 2. Check that the data inserted, falls within the relevant 'range' that the pivot table is using.
- 3. Check within each field of the Pivot Table to ensure that the data has not been 'unticked' from the drop-down list.

Q: How do I include (or remove) totals for each Row or column?

- 1. Position the cursor within the Pivot Table
- 2. Right Click mouse, select 'Pivot Table Options'.
- 3. Go to Tab 'Total & Filters', tick (or untick) the boxes for 'Show Grand Totals for Rows (Columns)'
- 4. Click 'OK'

Q: The Pivot Table contains data that does not come from a column within my data range?

This will be due to the use of a 'Calculated Item' or 'Calculated Field'. This basically means that the pivot table contains a formula to calculate data using the available columns. If you click on one of the figures, the formula should show, which would tell you which columns have been used to make this calculation.

Q: The Pivot Table takes a long time to adjust when I try to make changes to it.

If a 'Calculated Item' or 'Calculated Field' has been used, the pivot table will need to recalculate these fields for every item, each time a change is made. Unfortunately, this does mean that it takes some time to refresh the pivot table. If the time it takes is excessive, you should consider removing the calculated items, as they are not always useful.

- Q: How do I change the formatting of a Pivot Table?
  - 1. Click within the Pivot Table, and two new menu options will appear at the top of the screen under 'Pivot Table Options': Options & Design.
  - 2. Select 'Design', and then within the 'Pivot Table Styles' area, if you hover your mouse over each option, you can see your pivot table take on each option, before you select it.
  - 3. To select a design, just click the mouse.



### **Pivot Charts**

### **Overview**

Most data is best displayed visually, and Excel can display all information from a Pivot Table in a Graph, very quickly and easily. This graph will be linked to the Pivot Table, so when you make changes to the layout, the changes will automatically feed into the graph.

The variety of chart options is virtually unlimited in Excel, and you can change from one type to another very easily.

#### Method

The simplest method to generate a Pivot Chart, is to create the Pivot Table with the required data.

		_		
	А		В	C
1				
2	1			
3	1			
4	Net			
5	Years	-	Date 💌	Total
6	<b>= 2009</b>		Aug	£235
7			Sep	£439
8			Oct	£97
9			Nov	£242
10			Dec	£78
11	<b>⊒ 2010</b>		Jan	£243
12			Feb	£77
13			Mar	£248
14			Арг	£83
15			May	£252
16			Jun	£83
17			Jul	£252
18	Grand Tota	al		£2,328
10				

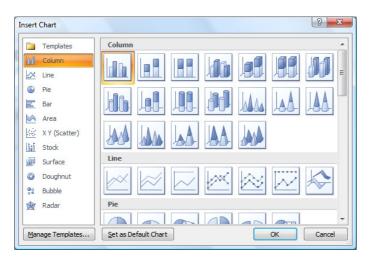
Click within the 'Pivot Table', and you will see the two additional Menu's appear in the Toolbar.

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Options 🔻	Field Settings 📑 Colli	apse Entire Field	Group Field	Z↓ Sort	*	Change Data Source *	Clear	Select Move PivotTal		DLAP Field +/- Field ols • List Buttons Head
PivotTable	Active Field	ł	Group	Sort		Data		Actions	Tools	Show/Hide
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A	B C D	E F G	H I J K	LN	1 N	0	PC	R S T	UVWX	Y Z PivotTable I
1										

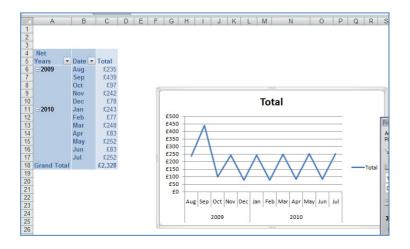
Select: Options, and then 'Pivot Chart'



Select the required Chart format form the following screen:



### The Chart will appear as follows:

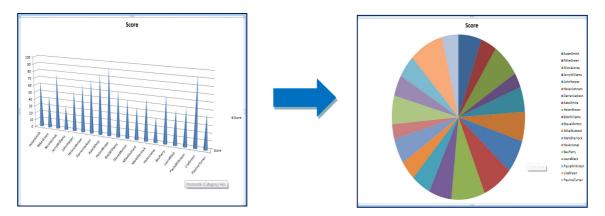


Position the cursor within the chart, and right click mouse to make changes.



### **Chart Type**

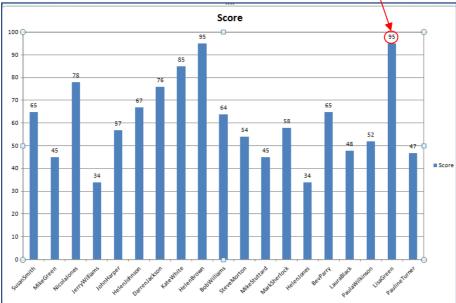
Select 'Change Chart Type' and choose any other 'Type', e.g.:



### **Data Labels**

By adding 'Data Labels' to the chart, you will show the value that each bar represents. To include these within the chart, you should:

- Position the cursor within the chart, Click the right mouse
- Select 'Add Data Labels'
- As you can see, this chart now includes the values for each bar:



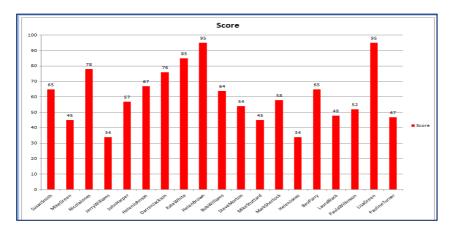




### **Formatting the Chart**

To amend the formatting of the chart, e.g, the colour of the Bars:

- Click onto one of the bars, Click the right mouse
- Select 'Format Data Series'
- Choose 'Fill' and select the required colour
- As you can see, this chart now includes the amended colours of each bar:



### **Format Axis**

To amend the format of the Axis:

- Click on the relevant Axis, Click the right mouse
- Select 'Format Axis'
- Here you can amend the Scale, Font, Number Format etc

### Gridlines

If you want to remove Gridlines from a chart (this can make the data clearer, especially if the chart is small), simply click on the gridlines and press delete.



### **Overall Format**

In Excel 2007, there are several pre-defined format's for Charts that you can choose from. Click on the chart, and you will see the four additional Menu's appear in the Toolbar.



Select: Design, and you will see many options to choose from

### **Chart Title**

Click on the 'Title' within the Chart to overwrite it. If you want to remove the title, simply click on the 'box' surrounding it, and press delete.





### **Slicers**

### **Overview**

Slicers can only be used with Pivot Tables & Pivot Charts and enable the User to Filter the data. They are very similar to the 'Filter' function in a Pivot Table, but much more User Friendly.

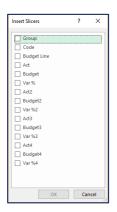
The beauty of Slicers, is that you can connect them to more than one Pivot Table (Chart), so when you make a change using the Slicer, ALL the Pivot Tables / Charts will be amended.

#### Slicer

Create a Pivot Table in the usual way, then go to the 'Analyse' (or Options) ribbon in the 'Pivot Table Tools', and select 'Insert Slicer':

File Home Insert Draw	Page Layout Formulas Data	Review View Developer	Help Analyze De	esign Format	♀ Tell me what you want to do	
Chart Name: Active Field: Chart 1	Drill Drill Drill Drill Collapse Field	Insert Insert Filter Slicer Timeline Connections	Refresh Change Data	Clear Move Chart	Fields, Items, OLAP Relationships 8  Sets   Tools	Field Field
C Options C Field Settings	Active Field	Filter	* Source * Data	Actions	Calculations	List Buttons * Show/Hide

You will then be prompted to select a 'Field' for the Slicer to connect to. Make your selection and click 'OK':



The Slicer can be connected to any 'Field' within the Pivot Table, and will appear similar to this:

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	CH46	CH62		CH63	Feb	Mar					
	N/A				Apr	May					
					Jun	Jul					
					Aug	Sep					
					Nov	Dec					
					(Jalaak)	\$11/10	¥				



The 'Slicers' enable Users to select single or multiple items to change the data.

To select a single item in a Slicer, click the required choice and the other items in the box will turn white. Once the selection has been made, any Pivot Charts or Tables will be updated to reflect the choice.

CH41	CH42	CH43
CH45	CH46	CH49
CH60	CH62	CH63
L1 2	L22	N/A
	L1	

Multiple items can be selected by holding the 'CTRL' key down and clicking the required items.

Postcode A	Postcode Area						
CH41	CH42	CH43					
CH45	CH46	CH49					
CH60	CH62	CH63					
L1 2	L22	N/A					
	1						

A range of items can also be selected by holding down 'Shift' and clicking on the first and last items in the range. This can also be used to select all items.

Postcode A	rea	ž= 🔨
CH41	CH42	CH43
CH45	CH46	CH49
CH60	CH62	CH63
L1 2	L22	N/A
	L1	

Where there is no data linked to an item it will remain in a list but will be a lighter shade than the main buttons as below. If an item with no data is selected the charts will be blank.



Postcode A	rea	# <b>*</b>
CH41	CH42	CH43
CH45	CH46	CH49
CH60	CH62	CH63
L1 2	L22	N/A
	L1	

To clear the selected items and show all data, click the 'Clear Filter' button at the top right of the Slicer and the charts will return to the original selection.

ostcode	Area	ž=
CH41	CH42	CH43
CH45	CH46	CH49
CH60	CH62	CH63
L1 2	L22	N/A
	L1	

### **Connecting Slicers**

### Note: This is only possible if the Field is available in all Pivot Tables / Charts

To connect a Slicer to more than one Pivot Table / Chart, simply right click on the Slicer, and select 'Report Connections'. You will be prompted with a screen (as below), for you to select the Pivot Tables to connect to this Slicer:

