How to Excel with CUFS Part 2

Excel 2010

Course Manual





Excel version 2010

1. Working with multiple worksheets

	1.1 1.2 1.3 1.4 1.5	Inserting new worksheets Deleting sheets Moving and copying Excel worksheets Adding headers and footers Changing a worksheet tab colour	3 3 4 4 5
2.	Looku 2.1 2.2 2.3	p Tables What are they? Creating a lookup table Using the lookup formula (VLOOKUP)	7 7 8
3.	Relativ 3.1 3.2 3.3	ve and Absolute references Relative references Absolute references Ranges of cells	10 10 11
4	The S	UMIF function	
	4.1	Using the function wizard with the SUMIF function	13
5.	Pivot	Tables	
	5.1	What are PivotTables?	16
	5.2	How to create Pivot Tables	17
	5.3	The Pivot Table Tool Bar	20
	5.4 5.5	Unanging the level of data displayed	20
	0.0 5.6	changing the fields displayed on the pivot table report	∠1 21
	5.7	Re-arranging the data displayed on the proclable report	22
	U		

1. Working with multiple worksheets and work books

1.1 Inserting new worksheets

There are a number of ways of adding extra worksheets to your workbook.

a) Click on the Insert icon on the Home tab of the ribbon

+	
Ins	ert [
∺ ••	Insert Cells
3 3	Insert Sheet <u>R</u> ows
i u	Insert Sheet <u>C</u> olumns
	In <u>s</u> ert Sheet

- b) Use the keyboard short cuts : Shift + F11
- c) Click on the new worksheet icon at the bottom of the sheet

67	AGTE	CIPS Level 2	GAAA	External Trading	LAAD	Training Courses					
68	AGTF	CIPS Level 3	GAAA	External Trading	LXBB	Transfer of Income					
69											
70											
4	H + + H Homework~ Transaction_Code_Bale										
Read	dy										

1.2 Deleting sheets

Again there are a number of ways to do this.

Option 1: Click on the Delete icon from the Home tab on the ribbon.





	Finance Division Devel	GAAA		Insert	٦	F
	Finance Division Devel	GAAA		Delete)
	Finance Division Devel	GAAA	-	Delete)
	Finance Division Devel	GAAA		<u>R</u> ename		ļ
	Finance Division Devel	GAAA		Move or Copy		k
	Finance Division Devel	GAAA	4	<u>V</u> iew Code		ŀ
	Finance Division Devel	GAAA	2	Protect Sheet		E
	CIPS Level 2	GAAA		Tab Color	•	F
	CIPS Level 2	GAAA		Hido		ļ
	CIPS Level 3	GAAA		<u>n</u> ide		>
				<u>U</u> nniae		
	Hammer I. Towns at a	- C- d-	1	Select All Sheets		ĺ
<u> </u>	Homework~ Transactio	n_code_	Daid	∎ <u>/_∿æ</u> */		

1.3 Moving and Copying Excel worksheets

You can move or copy a sheet (or tab) from one Excel workbook to another.

- a) Open the workbook that you want to move the sheet to.
- b) Return to your original worksheet and right-click on the tab name
- c) Select Move or Copy...
- d) Select from the drop down list the work book that you want your sheet copied into
- e) Specify exactly where in the new work book you want the sheet inserted.
- f) If appropriate, tick the **Create a copy** box
- g) Click on OK

Move or Copy		2	x		
Move selected sheets To book:					Select from the drop down list the workbook that you want to move the sheet to
Part 2 Look up tables.xlsx			-	F	move the sheet to.
<u>B</u> efore sheet:					
Transaction Category Category Description Sheet3			•		
(move to end)					
			-		
Create a copy					
	ОК	Cancel			
		E WITCH POPUL			

1.4 Adding Headers and Footers

It is very important that you include both headers and footers within your spreadsheet that detail amongst other things:

- What account codes/department/activities are covered
- What time period/accounting periods it relates to
- The source of the base data/information
- When the spreadsheet was prepared/ data extracted
- Name of the preparer
- Number of pages

To insert a header

a) Select the Header & Footer icon from the insert icon on the ribbon



b) Either

- (i) type the required text directly into the field at the top of the page*,
- (ii) insert one of the 'elements' into the header by clicking on it
- (iii) insert one of the template titles from the drop down list beneath the Header icon



* Once you have manually created a header it will be added to the drop down list of template headers (such as Filename, Date etc) and is available for all the other sheets within your workbook.

To insert a footer

a) Simply click on the Go to Footer icon



b) And then follow the same steps as used forcompleting the header

1.5 Changing a worksheet tab colour

This is function may be particularly useful if your work book has numerous sheets and you want to visually group a number of different sheets together. A couple of examples of this are:

- You have sent your work book to someone else and you want them to review/update just the sheets which have 'green' tabs
- Some of the sheets contain reference information only (i.e. the 'pink' sheets) which is then used in the calculations undertaken on other sheets

34	AGBM	Taxation and Property	GAAA	External Trading	XEAA	Departmental R
35	AGBN	Processing Centre	GAAA	External Trading	LAAA	Services Render
26 ₹ ₹		Brocossing Contro saction Type Transactio	on category	Extornal Trading Homework~ Tr	venn ansaction_Co	Donartmontal P. ode_Bala

To set/change the colour:

- Right click on the worksheet tab name and select **Tab Color** Highlight from the palette the colour you would like. a)
- b)

		Insert	
	×	<u>D</u> elete	
		<u>R</u> ename	
-		Move or Copy	Theme Colors
	ą	<u>V</u> iew Code	
_		Protect Sheet	
		Tab Color	
		<u>H</u> ide	
		<u>U</u> nhide	Standard Colors
	WDP	Select All Sheets	No Color
	ype		3 More Colors

2. Lookup Tables

2.1 What are they?

It is sometimes helpful to categorise items in a way that is meaningful to the department but not available in the standard CUFS output.

e.g.

- Certain cost centres may be grouped together to form a particular division in a department;
- Transaction codes can be classified into generic sets (income, expenditure and balance sheet).
- You may have a separate spreadsheet holding local departmental budgets for particular cost centres.

So, by assigning department defined categories to a collection of transactions, it is possible to turn CUFS data into tailored information in Excel.

For example, in CUFS, all transaction codes beginning with A??? relate to expenditure on stipends and all codes beginning with E??? relate to consumables expenditure. So if a table is set up in Excel (such as the example below), it can then be referenced within a block of data, using a LOOKUP formula to add non-CUFS information to your spreadsheet.

2.2 Creating a Look up Table

- a) Open up a new Excel workbook
- b) Simply enter your required reference information
- c) Give the worksheet tab and appropriate name
- d) Save

The example below shows a lookup table that details the significance of the first character of the Transaction code segment.

	А	В	С
1	Transac	tion Typ	<u>e Look up table</u>
2			
3		Α	Stipends
4		В	Stipends
5		С	Wages
6		D	Wages
7		E	Consumeables Expenditure
8		F	Other Expenditure
9		G	Museum Income
10		Н	Income Received from HEFCE
11		L	not used
12		J	Income Received from TTA
13		К	Academic Fees & Support Grants
14		L	Other Operating Income
15		Μ	not used
16		N	Endownment Income & Investment Activity
17		0	not used
18		Ρ	Balance Sheet - Fixed Assets
19		Q	not used
20		R	not used
21		S	Balance Sheet - Current Assets in Investments
22		Т	Balance Sheet - Stocks
23		U	Balance Sheet - Debtors
24		V	Balance Sheet - Creditors
25		W	Balance Sheet - Provisions & Defferred Grants
26		Х	Balance Sheet - Miscellaneous
27		Υ	Balance Sheet - Central use
28		Z	Balance Sheet - Central use
29			
30			
14 4))∣ Tra	nsaction T	Transaction category / Homeworkey Trans
		insuccion 1	

2.3 Using the Look-Up Formula (VLOOKUP)

In the example below we have identified in column H the first character of the transaction code for each data line. What we would like to do now is to look up what this letter represents and detail this information in column I (Transaction Type).

	А	В	С	D	E	F	G	Н	l I
1	Cost Centre	Cost Centre Description	Sof	Source of Funds	Transaction	Transaction Description	Period Activity (£)	Type	Transaction Type
2	AGAA	Finance: Administratio	GAAA	External Trading	FKAA	Internal Trading - Default Expen	-4,352.31	F	
3	AGAA	Finance: Administratio	GAAA	External Trading	LAAA	Services Rendered	249.2	L	
4	AGAA	Finance: Administratio	GAAA	External Trading	LKAA	Sales/Income - Miscellaneous	219.14	L	

To do this we use a formula called VLOOKUP which looks-up information held in vertical columns within your reference look up table.

- a) Make sure that both your working spreadsheet and the workbook containing your look-up table are open.
- b) In your working spreadsheet click into the cell where you would like Excel to put the answer once it has performed its operations i.e. in the example above it would be cell l2.
- c) Enter an equal sign to put it into function mode and then start to enter the formula shown below being very careful not to miss out the commas or the \$ signs.

The V stands for "vertical" – meaning the formula searches up and down columns		The reference for the cell content you want to look up	Comma	The worksheet location of your look up table (has to be in single quotation marks)	The range of cells in the look up table that contain both the item to be looked up and the answer		The column number in the table containing the "answer"		By including the FALSE argument, #N/A will show in the result if your reference cannot be found in the table	
=VLOOKUP	(H2	,	'Transaction Type'	\$B\$3:\$C\$28	,	2 (i.e. the second column in the range you have highlighted in this case column C)	,	FALSE)

Based on the content of the cell in column H, the formula looks at the source lookup table you created and brings back the corresponding description.

d) Simply copy this formula down in your working spreadsheet

	12 👻 🦢 🟂 =VLOOKUP(H2,'Transaction Type'!\$B\$3:\$C\$28,2,FALSE)								
	А	В	С	D	E	F	G	Н	l I
1	Cost Centre	Cost Centre Description	Sof	Source of Funds	Transaction	Transaction Description	Period Activity (£)	Туре	Transaction Type
2	AGAA	Finance: Administratio	GAAA	External Trading	FKAA	Internal Trading - Default Expen	-4,352.31	F	Other Expenditure
3	AGAA	Finance: Administratio	GAAA	External Trading	LAAA	Services Rendered	249.2	L	Other Operating Income
4	AGAA	Finance: Administratio	GAAA	External Trading	LKAA	Sales/Income - Miscellaneous	219.14	L	Other Operating Income
5	AGAA	Finance: Administratio	GAAA	External Trading	LLAA	Discount Taken	-70.94	L	Other Operating Income
6	AGAA	Finance: Administratio	GAAA	External Trading	XEAA	Departmental Reserves	0	х	Balance Sheet - Miscellaneous
7	AGAZ	Insurance Office	GAAA	External Trading	ERFB	Professional Indemnity Insurance	34,185.00	E	Consumeables Expenditure

3 Relative and Absolute cell references

In the vlookup formula above we added in what we call absolute references (indicated in Excel by the \$) to the range of cells that we wanted

3.1 Relative references

Normally if you are entering a formula that references two or more cells Excel uses the relative position of these cells to where you are in order to perform the calculation.

E.g.

Where the formula in cell D2 is = B2-C2 then excel looks at the cells in columns B and C which are in the same row as cell D2

	D2	• (*	f_x	=B2-C2	
	А	A B (D	
1	Cost centre	Budget (£)	Actual (£)	Difference (£)	
2	AGTA	2000	256	1744	
3	AGTB	9500	7500		
4	AGTC	12000	10000		
5	AGTD	1500	1800		
6					

If we copy this formula down to cell D3, Excel automatically updates the formula relative to its new position in row 3 and the formula becomes = B3-C3

	D3	•	f_{x}	=B3-C3
	А	В	С	D
1	Cost centre	Budget (£)	Actual (£)	Difference (£)
2	AGTA	2000	256	1744
3	AGTB	9500	7500	2000
4	AGTC	12000	10000	
5	AGTD	1500	1800	

3.2 Absolute references

However, sometimes you want to maintain the original cell reference in the formula when you copy it down. So you need to create what we call **absolute references**

E.g.

In the example below to calculate the available budget left to spend at the end of August (D3) we entered the formula **=B1-C3**

	D3	▼ (= <i>f</i> x	=B1-C3		
	А	В	С	D	
1	Annual Budget	9500			
2	Period	Period spend (£)	Year to date spend (£)	Funds avail (£)	
3	Aug-11	1200	1200	8300	
4	Sep-11	3000	4200	#VALUE!	
5	Oct-11	3300	7500	-6300	
6	Nov-11				-
	1				

However, if we simply copy this formula down to the rows below it will not generate the correct information.

How to Excel with CUFS Part 2 vs 0.1 vs0.1

This is because in cell D4 it has automatically entered the relative reference of **=B2-**C4 which is clearly not we want.

	D4	▼ (= <i>f</i> x	=B2-C4	
	А	В	С	D
1	Annual Budget	9500		
2	Period	Period spend (£)	Year to date spend (£)	Funds avail (£)
3	Aug-11	1200	1200	8300
4	Sep-11	3000	(())	#VALUE!
5	Oct-11	3300	7500	-6300
6	Nov-11			

Instead we need to lock / make "**absolute**" the budget value in B1, this is done by adding in \$ signs to its cell reference within the formula i.e D3=\$B\$1-C3

By doing this, when you copy the formula down it always refers back to B1 for the budget, whilst it continues to update the year to date spend (column C) relative to the row you are in.

	D4	▼ (= <i>f</i> _x	=\$B\$1-C4	
	А	В	С	D
1	Annual Budget	9500		
2	Period	Period spend (£)	Year to date spend (£)	Funds avail (£)
3	Aug-11	1200	1200	8300
4	Sep-11	3000	4200	5300
5	Oct-11	3300	7500	2000
6	Nov-11			

3.3 Ranges of cells

In the VLookUp formula of the previous chapter the cell range within the look up table was B3:C28.

We made all of these references absolute: **\$B\$3:\$C\$28**

This meant when you copied the formula down, the position of the answer in the look up table was unaffected by how many lines of data there was in your working spreadsheet and your relative position within it.

An Alternative method

An Alternative method of including an absolute range of cells in your formula is to "name" the cell range in the lookup table and then cross reference this name in your look up formula.

Highlight the range of cells that you want to include (i.e B3:C28)

Then click into this name box and type in a title for your highlighted range (i.e. *Lookup*)

	1		Press retur	'n
	Lookup	- (f _{ac} A	
	А	В	С	
1	Transac	tion Typ	e Look up table	
2				
3		А	Stipends	
4		В	Stipends	
5		С	Wages	
6		D	Wages	
7		E	Consumeables Expenditure	
8		F	Other Expenditure	
9		G	Museum Income	
10		Н	Income Received from HEFCE	
11		I	not used	
12		J	Income Received from TTA	
13		к	Academic Fees & Support Grants	
14		L	Other Operating Income	
15		М	not used	
16		N	Endownment Income & Investment Activity	
17		0	not used	
18		Р	Balance Sheet - Fixed Assets	
19		Q	not used	
20		R	not used	
21		S	Balance Sheet - Current Assets in Investments	
22		Т	Balance Sheet - Stocks	
23		U	Balance Sheet - Debtors	
24		V	Balance Sheet - Creditors	
25		W	Balance Sheet - Provisions & Defferred Grants	
26		х	Balance Sheet - Miscellaneous	
27		Y	Balance Sheet - Central use	
28		Z	Balance Sheet - Central use	

This time when you enter the VLOOKUP formula you specify the range's name instead of its individual cell references and you don't need to worry about the absolute references.

12 🔻		6.	=VLOOKUP(H2,Lookup,2,FALSE)	
	G	Н	l I	J
1	Period Activity (£)	Туре	Transaction Type	
2	-4,352.31	F	Other Expenditure	
3	249.2	L	Other Operating Income	
4	219.14	L	Other Operating Income	

4. The SUMIF Function

This function allows you to total all the individual entries of a particular category.

In the example below, all the income and expenditure transactions on a trading account (source of funds GAAA) have been grouped together into various types. The SUMIF formula has then been applied to total all the transactions for each type in the source data and to display just the total for each within this worksheet.

	А	В	С	D
1	Summary			
2	Year End	ing Jul 2011		
3			£	
4	Income			
5		Museum Income	0	
6		Income Received from HEFCE	0	
7		Income Received from TTA	0	
8		Academic Fees & Support Grants	0	
9		Other Operating Income	94,202	
10		Endownment Income & Investment Activity	0	
11		Total Income	94,202	
12				
13				
14	Expenditu	ire		
15		Stipends	0	
16		Wages	481	
17		Consumeables Expenditure	49,753	
18		Other Expenditure	(4,295)	
19		Total Expenditure	45,939	
20				
21		Surplus/(defecit)	48,263	
22				

4.1 Using the function wizard with the SUMIF Function

Some Excel users prefer to use the function wizard to help learn and build more complex formulas.

a) Position the cursor in the cell where the formula will go and ...



Or select Insert function from the Formulas tab on the ribbon itself.

🛣 🛛 🚰 🛛	301			1 2 1		4. *				Name and	Homework~
File	Home	e Inse	rt Pag	ge Layout	Fo	rmulas	Data	Review	View	Developer	Add-Ins
fx Insert Function	Σ AutoSum	Recently Used •	Financial	Logical	A Text	Date &	Lookup & Reference	Math &	More Functions	Name Manager	[™] Define Nam <i>f</i> [™] Use in Form ™ Create from
\bigcirc	05		6	Function	n Libra	ry					Defined Names

The Insert Function window appears.

b) In this window you can either type in a search - based on what you are trying to do or select a function from the lists. In this example we want to add a number of cells together, so, when you type "add cells" into the search box, Excel offers a selection of functions.

Insert Function	? ×
Search for a function:	
add cells	Go
Or select a <u>c</u> ategory: Recommended	Se
Select a functio <u>n</u> :	froi
SUMIFS DSUM	pre
SUMIF	
DCOUNTA	
DCOUNT	
SUMIF(range,criteria,sum_range)	
Adds the cells specified by a given condition of criteria.	
Help on this function OK	Cancel

Select **SUMIF** from the list and press **OK**

- c) The next part of the wizard invites you to select the cells (or ranges of cells) that contain:
 - RangeThe column in the source data that contains the names of the
Items you want it to total e.g. transaction types
 - **Criteria** From the summary report the name of the particular transaction type you want it to look for e.g. Other Operating Income
 - **Sum range** The column in the source data that contains the values you want it to add together for whichever criteria you have selected.

	G	Н	1	J	K	L	
	Period Activity (E) Type	e Transaction Type				
Expen -4,352.3		31 F	Other Expenditure				
	249	.2 L	Other Operating Income				
eous	219.	14 L	Other Operating Income				
	-70.	94 L	Other Operating Income				
s Functio	n Arguments	<u> </u>	Construction Tage-Store		2	x	
SUMI	F						
	Range	~ Transactio	on_Code_Bala'!I:I 💽 = {"Trans	action Type";"	'Other Expendit	ture";"Ot	
	Criteria	B9	= "Other	Operating Inco)perating Income"		
8	Sum_range	Transaction	_Code_Bala'!G:G 🛛 💽 = {"Perio	d Activity (£)";·	-4352.31;249.2	2;219.14;	
Adds th	ne cells specified by a give	n condition or	= -94202 criteria.	.02			
Sum_range are the actual cells to sum. If omitted, the cells in range are used.							
ra _{Formul}	a result = -94202.02						
Help or	n this function			ОК	С	ancel	
	III	12 C		_			

- d) All parts of the formula (the arguments) are now complete, press OK.
- e) The wizard will close down leaving the finished formula in the cell (with closing brackets added).

	C9 ▼ (<i>f_{sc}</i> =SUMIF('Homewor	k~ Transact	ion_Code_	_Bala'!I:I,B	9,'Homewo	rk~ Transac	tion_Code	_Bala'!G:G)	
	В	С	D	/ E	F	G	Н	I.	
1				/					
2									
3									
4									
5	Museum Income								
6	Income Received from HEFCE								
7	Income Received from TTA								
8	Academic Fees & Support Grants								
9	Other Operating Income	-94202							
10	Endownment Income & Investment Activity								
11									
12									
13									
14									
15	Stipends								
16	Wages								
17	Consumeables Expenditure								
18	Other Expenditure								

5.1 What are pivot tables?

Pivot tables are interactive tables in Excel that can quickly summarise or cross-tabulate large amounts of data.

They allow you to:

- rotate rows and columns to see different layouts of the source data
- filter data and display with subtotals and show on different pages
- expand the pivot table to see details of one or more items
- drill down to create separate detailed data extracts
- create charts based on the data with a single click of the mouse

Pivot tables also allow you to specify how you would like the data summarised by using functions such as 'count', 'sum' and 'average'. Subtotals and grand totals can be included automatically or you can define your own.

You can create a pivot table from:

- A Microsoft Excel list or database
- Multiple Excel worksheets
- An external database
- Another pivot table

The Scenario

In Excel, analyse departmental expenditure on source of funds AAAA (Chest Nonpayroll) by exporting a standard report and creating a pivot table from the data.

Method:

Stage 1

- Run the Transaction Code Balance Report Exportable
- Save as a Text file and open up in Word to remove page breaks
- Import into Excel and save

Stage 2

- Create a look up table that provides descriptions for the first two letters of the transaction codes starting with E and F
- Insert three extra columns into the data spreadsheet and strip out the transaction code details
- Using the left function extract the first two characters of the transaction code and look up their description

Stage 3

- Select the whole sheet and go to Pivot Reports
- Create a pivot report where page = cost centre, rows = category description and data = sum of period activity

5.2 How to create Pivot Tables

- a) In Excel, ensure all the columns in your data source have headings. Select the whole worksheet.
- b) From the Insert tab on the ribbon select Insert Pivot Table



- c) Specify your source data and where to put the Pivot table
 - Check that you have the correct data source (i.e. your worksheet) selected.
 - Ask for the pivot table report to be placed on a new worksheet
 - Click OK

Create PivotTable	
Choose the data that you want to analyze	
Select a table or range	
Table/Range: AAAA sof Transaction_Code_Balan'!\$A\$1:\$I\$355	
○ Use an external data source	
Choose Connection	
Connection name:	
Choose where you want the PivotTable report to be placed	
<u>N</u> ew Worksheet	
Existing Worksheet	
Location:	
OK Cancel	

- d) Start to build your required report layout by selecting fields from within the PivotTable Field list on the right of the screen and dragging them into one of the following boxes at the bottom of the page:
 - Report filter (acts a bit like a page break)
 - Column Labels
 - Row labels
 - Values

File	Home	Insert	Page Layout	Formulas	Data	Review	View	Developer	Add-Ins				۵	0	- 6	23
PivotTable (Name: Ad	tive Field:	∳≣ Expan	d Entire Field	🕈 Grou	up Selection	Ą	AZ				±				
PivotTable1	1 Co	ost Centre I	Descr	d Entre Freid	🗢 Ung	roup	7.4	ZA								
😭 Option	ns 👻 🍳	Field Sett	tings Collap	se Entire Field	Ez Grou	up Field	Z A V	Sort Ins Slice	ert Refresh er • •	- C F	ield List	+/- Field Buttons Header	s			IZ(
PivotTal	able		Active Field		G	roup		Sort & Filter		C		Show				
A1 \bullet f_{x} Cost Centre Description													~			
			А				В		С	L		PivotTable Field	l List		-	×
1 Cost	t Centre E	Descriptio	on			(All)		-			h	Choose fields to a	add to			
2						-						report:				
3 Row	/ Labels					- Sum of	Perio	od Activity				Source of funds				
4 Audi	io Visual a	and Mult	timedia					83				Source of Fur	nds Desc	ription	1	
5 Cate	ering supp	olies and	Services					8262.19				Cost Centre code Cost Centre Description Transaction code Transaction possibility				
6 Clear	aning mat	erials an	d Equipment,	Janitorial Su	pplies			5.64								
7 Com	nputing Su	upplies						35565.78								
8 Cred	dit Card co	ontrol ac	ccount					60696.36				Category Cod	ie ie	201		
9 cred	litor (accr	rual)						-6800				Category Description				
10 Estat	ites and B	uildings					3407.45					Period Activity				
11 Furn	niture, Fur	nishings	and Textiles				3593.49									
12 Libra	Library and publications							1946.4								
13 Med	Medical, surgical and nursing Supplies and Services						9.55									
14 misc	miscellaneous consumeables						59.95									
15 Misc	Miscellaneous/unclassified						22063.79				=	E				
16 not u	used						-91.6									
17 Print	ting							5160.1								
18 Profe	fessional	and Bou	ght in Service	s			164994.11					Drag fields between areas below:				
19 Safe	ety and Se	curity					5993.02					Report Filter Column Lab				D
20 Stati	ionery an	d Office	Supplies				18307.24					Cost Centr V				
21 Teleo	commun	ications	and Postage				14798.39									
22 Tran	nsfer of E	xpenditu	ire				-121859.31									
23 Trav	el and Tr	ansport	(inc Vehicle h	ire and subsi	stence)			13348.43								
24 Wor	rkshop an	d Mainte	enance Suppl	ies (Lab and	Estates)			147.18								
25 #N/A	A							-8010.15				Row Labels	Σ	Valu	ies	
26 Gran	nd Total							221681.01				category D 🔻	S	um of	Pe	•
27																
28																
29																
30																=1
21 4 4 5 5	Sheet	2 AA	AA sof Transa	ction Code Ba	alan 🖌	Transactio	n cate	egory 🦄	/	▶ [Ť	Defer Layout	Upd	U	Ipdate	

In this example, Transaction category balances are shown in a simple table. Note, this pivot table has the Cost Centre code as a filter (cell A1) – the Cost Centre selection can be changed to show one, all or a selection of costs centres. The totals for each transaction code will then update according to the selections made.

It is quite easy to change the table so the cost centre totals for each transaction category are displayed in columns. Simply drag the shaded Cost Centre code box down into the table (just above the Total cell)

By default when you add a field to the values region it is displayed as "Sum of ..." . However, you can change the mathematical basis of this field.

- a) Click on the down arrow next to the item in the values region
- b) Selecting Value Field Settings from the context menu that pops up



- c) Select from the list the required alternative
- d) Use the **Number Format** button to format these cells appropriately.
- e) Click OK

(Value Field Settings
	Source Name: Period Activity Qustom Name: Average of Period Activity
	Summarize Values By Show Values As Summarize value field by
	Choose the type of calculation that you want to use to summarize data from the selected field
	Sum Count Average
A short cut to also allow you	Max Min Product
to format the values	Number Format OK Cancel

5.3 The Pivot Table Tool Bar

Make sure that your curser is somewhere within your PivotTable and then above your ribbon a new tab entitled PivotTable Tools should be displayed.



Simply click on this tab to open up the tool bar.

5.4 Changing the level of detail displayed

If you double click on either a row or column field e.g. "Audio visual..." an additional Show Detail window will appear and allow you to add more details to your report.

	А	A B C		С	D	E	F	
1	Cost Centre Description	(All) 🔽						
2								
3	Row Labels 🖓	Sum of Period Activity		Show	Detail	2	×	
4	Audio Visual and Multimedia	83.00		Choos	e the field containing th	e detail you want to show:		
5	Catering supplies and Services	8,262.19		Sour	ce of funds	e detail you want to grow.		
6	Cleaning materials and Equipment, Janitorial Supplies	5.64		Sour				
7	Computing Supplies	35,565.78		Cost	Centre code Centre Description			
8	Credit Card control account	60,696.36		Tran	saction code			
9	creditor (accrual)	(6,800.00)		Cate	saction Description porv Code			
10	Estates and Buildings	3,407.45		Perio	d Activity		-	
11	Furniture, Furnishings and Textiles	3,593.49				01/		
12	Library and publications	1,946.40				UK Callo		
13	Medical, surgical and nursing Supplies and Services	9.55		_				
14	miscellaneous consumeables	59.95						
15	Miscellaneous/unclassified	22,063.79						
16	not used	(91.60)						
17	Printing	5,160.10						
18	Professional and Bought in Services	164,994.11						
19	Safety and Security	5,993.02						
20	Stationery and Office Supplies	18,307.24						
21	Telecommunications and Postage	14,798.39						
22	Transfer of Expenditure	(121,859.31)						
23	Travel and Transport (inc Vehicle hire and subsistence)	13,348.43						
24	Workshop and Maintenance Supplies (Lab and Estates)	147.18						
25	#N/A	(8,010.15)						
26	Grand Total	221,681.01						
27								

	A	В
1	Cost Centre Description	(Au,
2		
3	Row Labels	Sum of Period Activity
4	🗏 Audio Visual and Multimedia	83.00
5	EABC	28.00
6	EAEZ	55.00
7	Catering supplies and Services	8,262.19
8	🗄 Cleaning materials and Equipment, Janitorial Supplies	5.64
9	Computing Supplies	35.565.78

5.5 Drilling down to see what a value consists of

a) Double click on any individual value to see on a new sheet a breakdown of the component entries from your original source spreadsheet.

	А	В		
1	Cost Centre Description	(All)	-	
2				If you doub
3	Row Labels -	Sum of Period Ad	tivity	CIICK ON TH
4	Audio Visual and Multimedia		83.00	65
5	Catering supplies and Services	8,	262.19	
~	and the second second second second			

A new worksheet opens

	E	F	G	Н	I
n 🔻	Transaction code 💌	Transaction Description 💌	Category Code 💌	category Description	Period Activity
An	EABC	Display Boards	EA	Audio Visual and Multim	28
	EAEZ	Photographic Equipment &	EA	Audio Visual and Multim	55,

Excel gathers all the lines of data that make up the total in the pivot table and displays it on a new sheet (or tab). So if you clicked on ten different totals in the pivot table, you would create ten additional sheets in the Excel work book

Tip: Be careful to delete any additional sheets that you no longer require – Excel workbooks containing pivot tables can double in size compared to those containing just the raw data.

5.6 Changing the fields displayed on the pivot table

You can amend your pivot table and change the fields that are displayed by either adding new ones or removing existing ones.

Simply click on the Field List icon in the ribbon



Then tick or un-tick the required fields

Or alternatively change their position in your report

5.7 Re-arranging the data displayed

By returning to the PivotTable Field List you can easily rearrange the layout of your report by dragging the field into a different region. As each field summarises multiple rows of information from the original data source this allows you to view the data in different ways.

e.g. In the example below the Cost Centre has been transferred from the Report Filter region to the Row Labels region.

	A3 🔻 💿 🏂 Row Labels		
	А	В	Q PivotTable Field List
1			Choose fields to add to
2			report:
3	Row Labels	Sum of Period Activity	Source of funds
4	Audio Visual and Multimedia	83.00	Source of Funds Description
5	Procurement Services - An	28.00	Cost Centre code
6	Training	55.00	Cost Centre Description
7	Catering supplies and Services	8,262.19	Transaction code
8	Director of Finance	132.39	Transaction Description
9	Finance Committee	296.50	Category Code
10	Finance General	939.33	Category Description
11	Financial Planning & Anal	23.80	Period Activity
12	Financial Reporting	1,251.04	
13	Financial Transaction Pro	18.68	
14	Procurement Services	340.04	
15	Procurement Services - An	3,839.98	
16	Taxation and Property	789.20	
17	Training	631.23	
18		5.64	Drag fields between areas below:
19	Finance General	5.64	🝸 Report Filter 📰 Column Lab
20	Computing Supplies	35,565.78	
21	ABC Programme	84.72	
22	Director of Finance	188.40	
23	Finance General	6,576.39	
24	Finance: Administration	189.00	
25	Financial Planning & Anal	10,797.59	III Row Labels Σ Values
26	Financial Transaction Pro	6,392.90	category D ▼ Sum of Pe ▼
27	Insurance Office	122.90	Cost Centr 🔻
28	Payroll	1,775.44	
29	Procurement Services	510.00	
30	Research Accounting	265.05	
21	Tavation and Property		Defer Lavout Upd
Der			

	A12 💌 👘 Furniture, Furnishings and Textiles									
	A	В	С	D	F	PivotTable Field List	×			
1					h	Choose fields to add to				
2						report:				
3	Sum of Period Activity	Column Labels 💌				Source of funds				
4	Row Labels 🖓	AAT Level 3	AAT Level 4	ABC Programme	٤.	Source of Funds Description	P			
5	Audio Visual and Multimedia					Cost Centre code				
6	Catering supplies and Services					Cost Centre Description				
	Cleaning materials and Equipment, Janitorial Supplies					Transaction code				
8	Computing Supplies			84.72		Category Code				
9	Credit Card control account									
10	creditor (accrual)					Period Activity				
11	Estates and Buildings									
12	Furniture, Furnishings and Textiles									
13	Library and publications									
14	Medical, surgical and nursing Supplies and Services									
15	miscellaneous consumeables									
16	Miscellaneous/unclassified	165.00	384.00	1,020.00						
17	not used									
18	Printing					Drag fields between areas below:				
19	Professional and Bought in Services	1,547.50	11,932.99			Report Filter Column Lab	J			
20	Safety and Security					Cost Centr	-			
21	Stationery and Office Supplies									
22	Telecommunications and Postage									
23	Transfer of Expenditure	(1,712.50)	2,533.01	506.28			1			
24	Travel and Transport (inc Vehicle hire and subsistence)									
25	Workshop and Maintenance Supplies (Lab and Estates)					Row Labels Σ Values				
26	#N/A					category D ▼ Sum of Pe ▼				
27	Grand Total	0.00	14,850.00	1,611.00			2			
28							-			
29							-			
30										
14	Pivot table AAAA sof Transaction_Code_Balan	Transaction catego	ory /口			Defer Layout Upd Update				

And in this example we have transferred Cost Centre to the Column labels region