

# Make use of the DataPilot

The DataPilot can reveal hidden depths to your data!

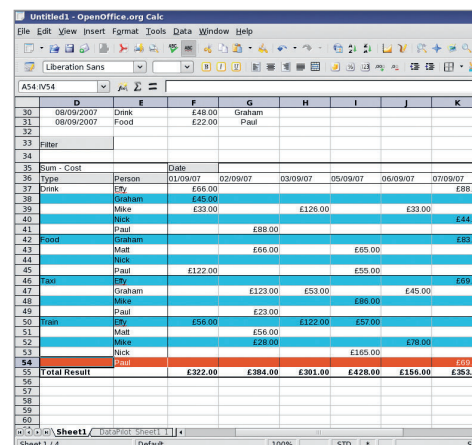
You might think that a spreadsheet is all about numbers and functions, and in most cases you would be right. But there is a shady part of the infaverse where spreadsheet cells start resembling data that you might expect to see in a database. A spreadsheet can be a good place to manipulate this data and make it do what you want!

If you come from the world of *Microsoft Office*, you may have come across a feature called the 'pivot table'. Well, the *OOo* DataPilot is pretty much the same thing, although you should follow this tutorial to see how it works.

The first thing you need to make use of the DataPilot is some suitable data. Although you could use it on two columns of data if you wanted, there probably wouldn't be much point. The DataPilot

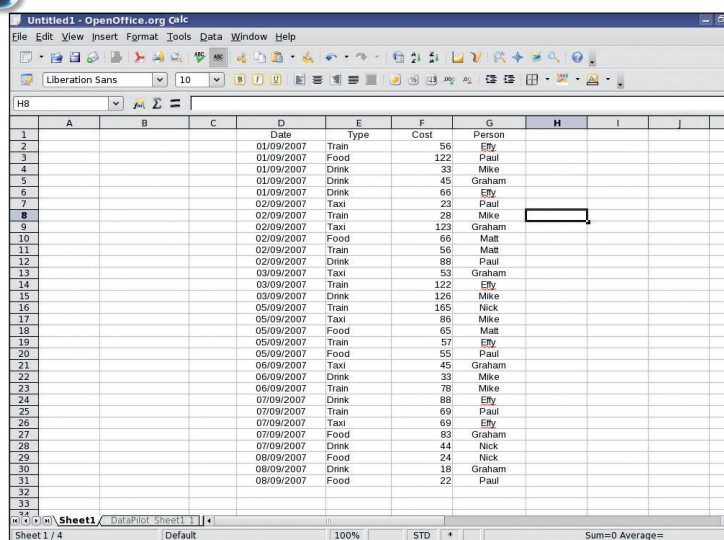
works best at revealing the hidden depths in rich data which is usually contained by multiple columns, with elements that have some form of commonality. In English this means lines of data where the same values or labels crop up time and time again. There are endless examples of this sort of data in the real world, from all sorts of sources – it might be a list of sales data including the names of items that are sold, or even perhaps some sort of server error log, where the same error numbers might crop up again and again. If there are no repeating elements to your data, no hidden structure to it, then you probably won't get much out of building a DataPilot table from it.

This tutorial uses a simple but appropriate set of data of some fictitious expenses, but feel free to follow along with your own data if you like!



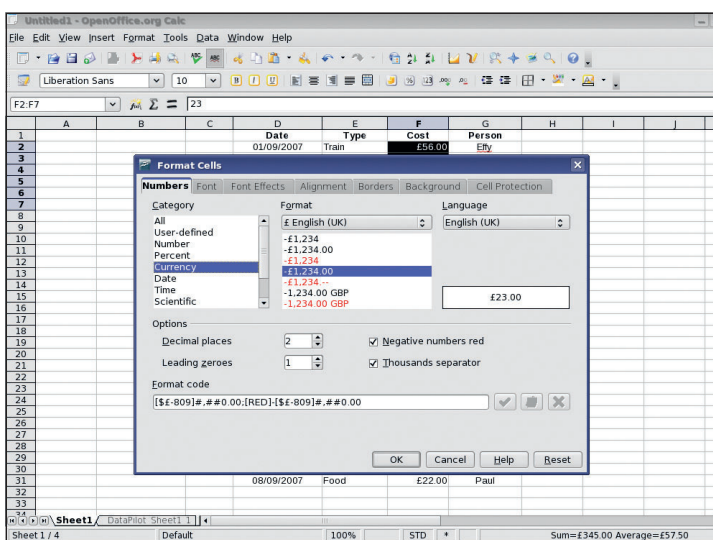
The DataPilot resembles MS Office's pivot tables, and is invaluable for digging through data.

## Calc: using the DataPilot



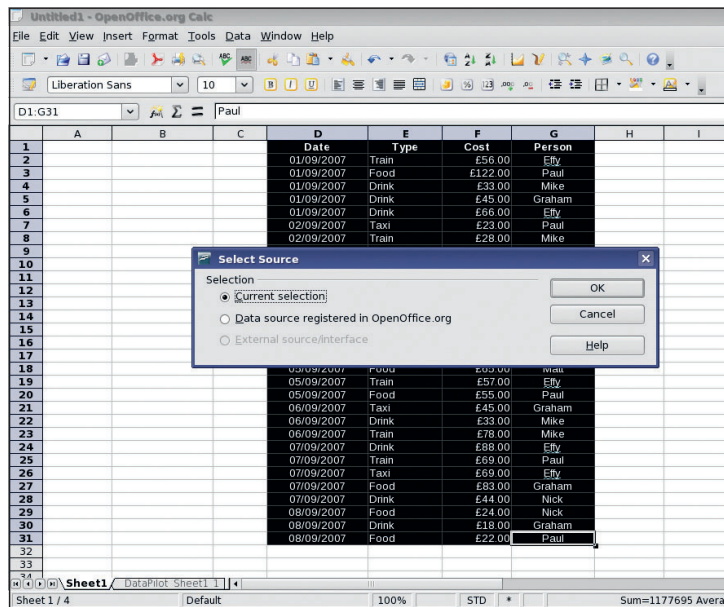
### 1 Create data

Before we can use the DataPilot, we need some data. This might come from a database, a spreadsheet or other source; it's important the data is organised into consistent columns or rows, like this (fictitious!) expense account for the *Linux Format* team. Each item will have a date, a type, a cost and a person associated to it: the sort of flat file data you'd often use for a DataPilot operation.



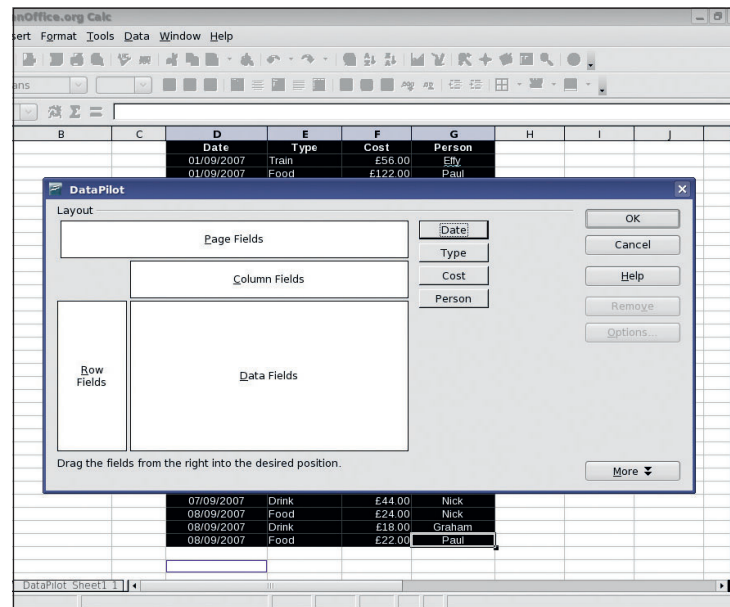
### 2 Format cells by selecting fields

Before running DataPilot, select the data fields. Include the column headers at the top of the data. These will be used as labels within the DataPilot wizard itself. It goes without saying that you should also format the data appropriately – use date formats for date entries, currency for costs. The DataPilot will use the same formats in the output; to be legible, you should sort out the data first.



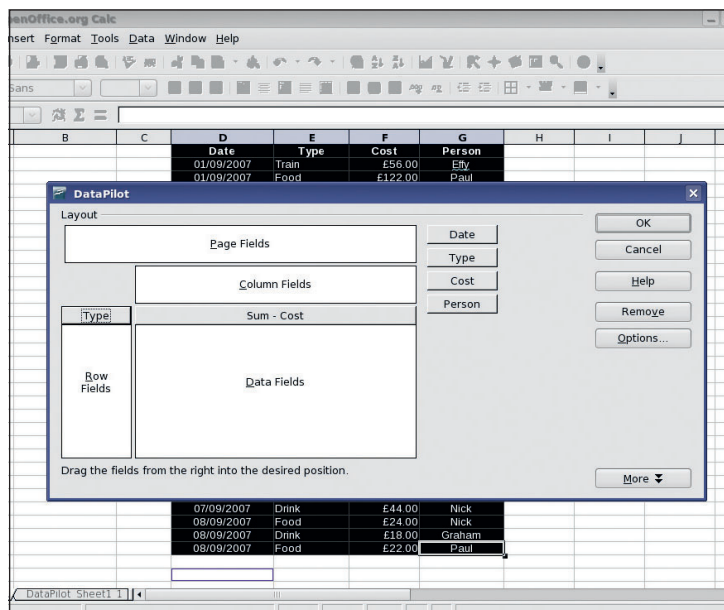
### 3 Run the DataPilot

From the menu, choose Data > DataPilot > Start to start the DataPilot wizard. The first dialogue window that pops up will ask you for the source of your data. As we already had some cells selected, this option will be highlighted by default. If you run the DataPilot without some cell selected, you can either manually enter a range here, or choose a database source for your data. Either way, the results should be the same.



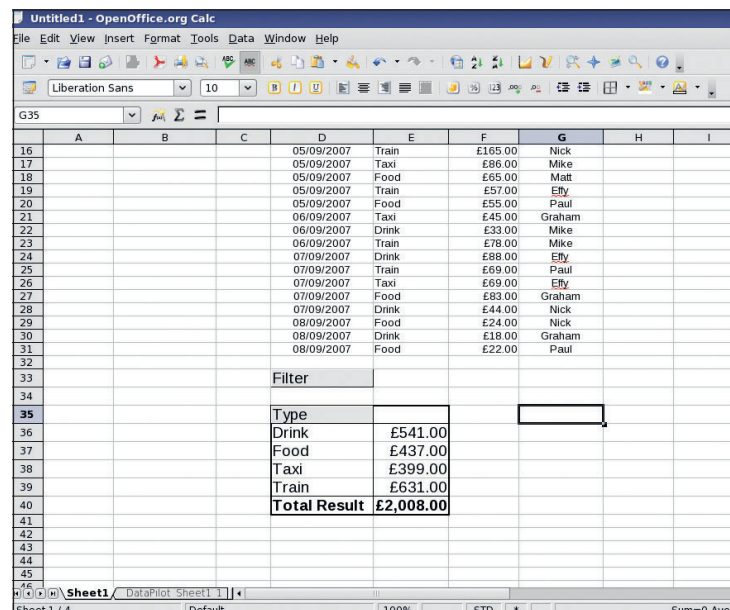
### 4 Main dialogue

The main DataPilot dialog may be a bit confusing at first. It is actually a graphical organiser for your data. The boxes on the left are the categories used by the DataPilot. Additionally there is a row of buttons toward the right with names that should appear familiar to you – these are the labels you gave your data series, which have been picked up by the wizard to use as part of the DataPilot operations.



### 5 Choose Data

This part can be a bit confusing at first, but we'll start with a simple example. Click on the button marked Type and drag it to the left-hand box marked 'Row Fields'. Now click and drag the Cost button into the central box marked Data Fields. It should appear there and have changed to say 'Sum - cost'. If you make a mistake, you can drag the buttons back out of the marked areas to reset them.



### 6 Get the output

This example will generate a new table from our data, providing a summary of the costs (summed) for each one of the types that appear in the data. The DataPilot does not need to know the types beforehand – it will automatically sift through the data and find all the discrete entries for itself. When you click on okay, a small table will have been created below your data.



Type	Amount
Drink	£571.00
Food	£437.00
Taxi	£399.00
Train	£631.00
<b>Total Result</b>	<b>£2,038.00</b>

## 7 Reading the results

The table shows, quite clearly and simply, the totals of expenditure on each different type, and a total expenditure at the end. At this point it is worth knowing that unlike other types of operations in *Calc*, the DataPilot tables need to be refreshed if the data they are built on changes – they will not dynamically update. Change a value, then right click in the DataPilot table and choose 'Refresh' from the menu to see this working.

Type	Person	Amount
Drink	Effy	£154.00
	Graham	£93.00
	Mike	£192.00
	Nick	£44.00
	Paul	£88.00
Food	Graham	£83.00
	Matt	£131.00
	Nick	£24.00
	Paul	£199.00
Taxi	Effy	£69.00
	Graham	£221.00
	Mike	£86.00
	Paul	£23.00
Train	Effy	£235.00
	Matt	£56.00
	Mike	£106.00
	Nick	£165.00
	Paul	£69.00
<b>Total Result</b>		<b>£2,038.00</b>

## 9 Modify our report

Reset the filter if you made one and right click on the table again. This time choose Start from the menu, and you will be back at the original DataPilot dialog. Now we can see what happens with a more complicated example. Leaving everything as it is, drag the Person button into the Row Fields box. Each piece of the data can only be in either a column or a row at a time, although they can also appear in the data fields box if you want.

## 8 Apply a filter

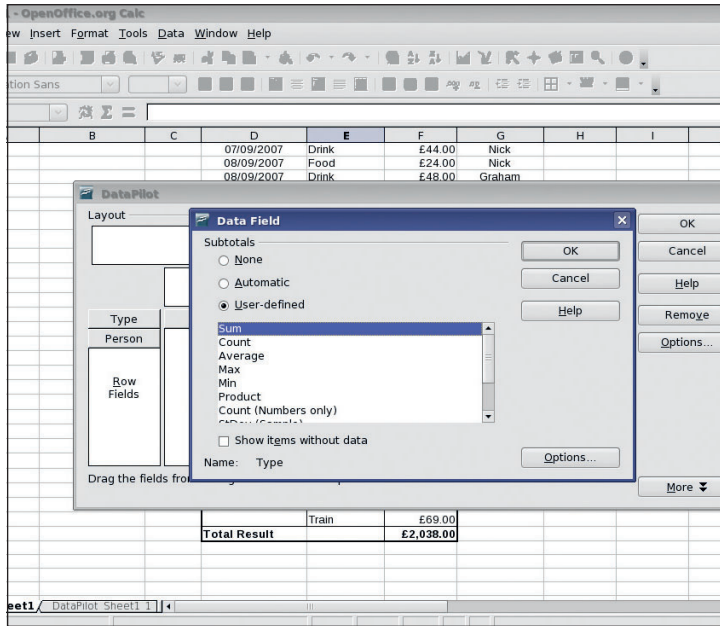
You will also see that above the output table is a small box marked Filter. Click on this to get the Filter Options dialog. The filter is fairly straightforward to understand and use. It can do simple comparisons with the data entered in the fields supplied. You could for example Filter out all the costs incurred by Paul by choosing Person > Paul. By combining these simple filters you can create some quite complex customisations.

Person	Type	Amount
Effy	Drink	£154.00
	Taxi	£69.00
	Train	£235.00
Graham	Drink	£93.00
	Food	£83.00
	Taxi	£221.00
Matt	Food	£131.00
	Train	£56.00
Mike	Drink	£192.00
	Taxi	£86.00
	Train	£106.00
Nick	Drink	£44.00
	Food	£24.00
	Train	£165.00
Paul	Drink	£88.00
	Food	£199.00
	Taxi	£23.00
	Train	£69.00
<b>Total Result</b>		<b>£2,038.00</b>

## 10 Viewing subcategories

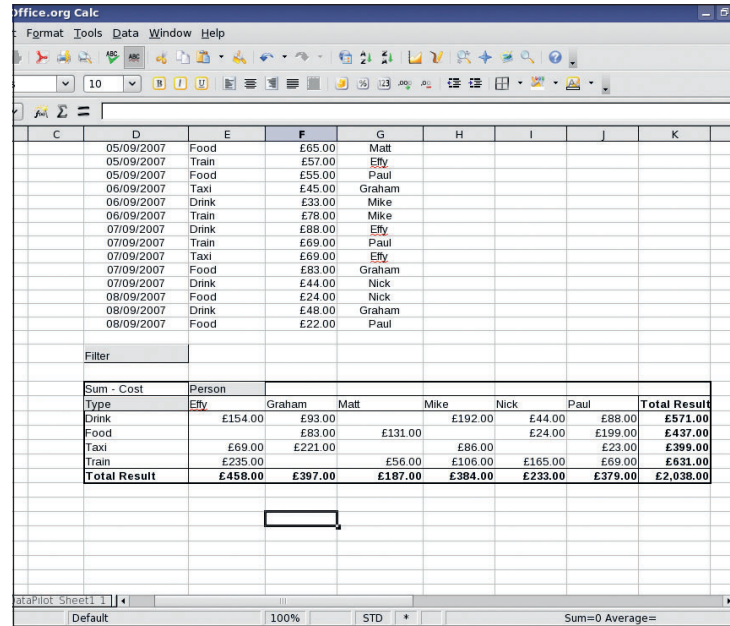
Now the report shows a bigger table. This time it is sorted by type, but the types are then subdivided per person. You could also view this table the other way around, broken down by person and then by type – it just depends what order the buttons appear in the Row Fields box. You can adjust this just by shuffling the buttons around.





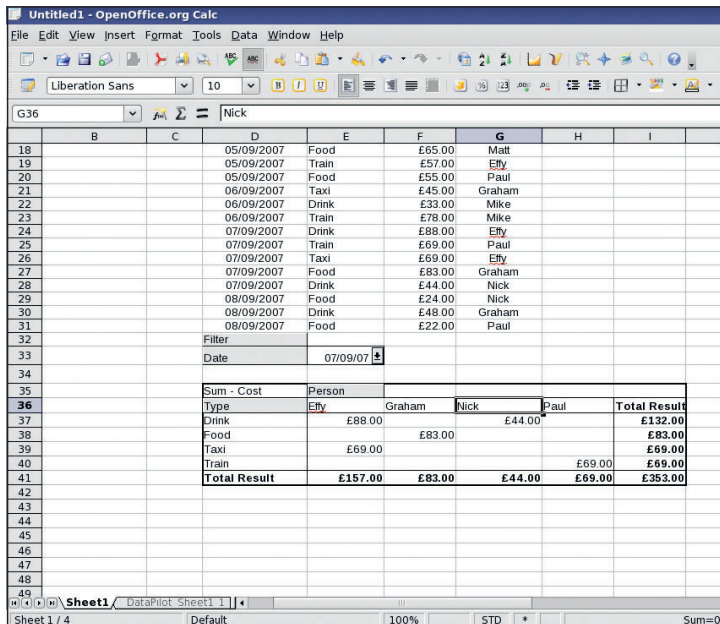
### 11 Add subtotals

Right-click on the output and choose Start again to get back to the dialogue. Now click once on the Type button and click on the Options button that appears in the bottom right. A new dialogue will open where you can select a few things, including Subtotals. Select this and choose manual, then choose Sum. Now when you look at the table, each part has a subtotal as well as the big total at the end, so you can see the data broken down several ways.



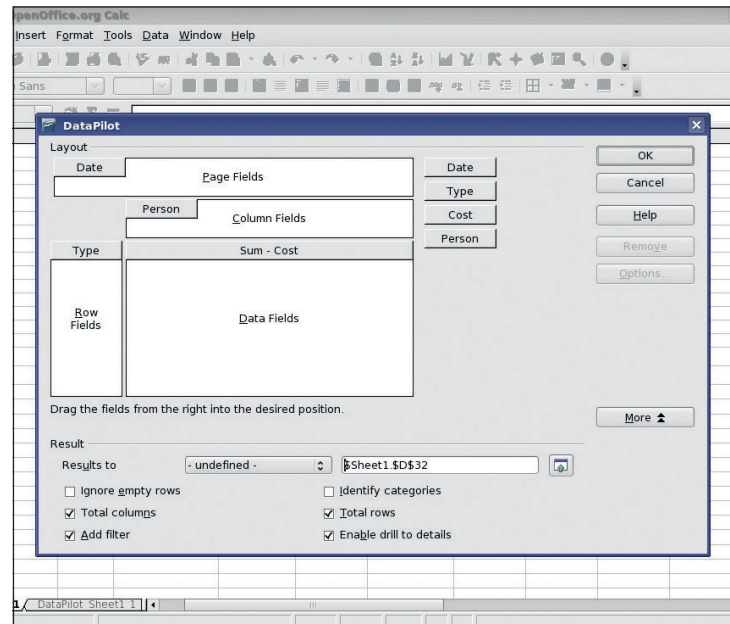
### 12 Reorganise the table

For a lot of data, it may make more sense to organise the data in a different way. Right click and choose Start from the menu to go back to the dialogue. Now, drag the People button into the Column field box. This will change the way data is arranged, as each person will now have there own column. The totals can be added up in two directions now, and it makes it easier to see both the most expensive activity, and the person causing the most costs!



### 13 The Page field

Back to the dialogue again, and this time we will investigate the Page field. Drag the Date button into this area and click on Okay. You will now see that under the Filter field we had before, there is a cell marked Page and a drop-down menu next to it showing '--all--'. Click on the arrow next to it to show only the data from a particular date. You could use any field to view this by, and it makes a handy third dimension to the data while still remaining easy to interpret.



### 14 Options

We haven't covered all the options in the DataPilot. Really we have only scratched the surface. There is a whole world of stuff in there! Be sure to investigate all the options, and click on the More button in the dialogue to get some useful options on where to place the resulting table (which could even be on a different sheet! **LXF**)

