

Excel- Summarise and Analyse Data with Pivot Tables

Pivot Tables are one of Excel's best features. You can use a Pivot Table to summarise and analyse data. It is particularly useful if you work with large amounts of data and need a quick, flexible way to produce reports from it.

Make sure your data is well laid-out

In order to create a Pivot Table successfully, just follow a few golden rules:

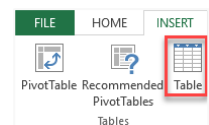
1. Your data should be arranged in columns and rows.
2. Each column should contain a descriptive heading.

| | A | B | C | D | E |
|---|------------|-----------|----------|-----|--------|
| 1 | First Name | Last Name | Salary | Age | Gender |
| 2 | Stephanie | Corbett | £125,000 | 32 | Female |
| 3 | Diane | Ford | £37,500 | 25 | Female |
| 4 | Rose | Kirby | £25,000 | 26 | Female |
| 5 | Frances | Holt | £70,313 | 38 | Female |
| 6 | Anne | Beager | £21,875 | 31 | Female |



Although not essential, it's good practice to apply formatting, e.g. **bold** to the column headings.

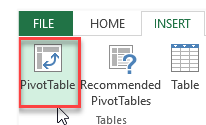
3. Avoid empty *rows* or *columns* within the data (an occasional empty cell is OK).
4. Turning your data into an *Excel Table* will make it easier to add or remove rows and columns in your data without having to redefine the data range of the Pivot Table.
 - o Click a cell within your block of data.
 - o Press **CTRL + T** on the keyboard, or click the **Insert** tab on the ribbon and choose **Table**.



Use the *Table Tools* on the ribbon to apply a *Table Style* to your data.

Create the Pivot Table

1. Click the **Insert** tab
2. Click **Pivot Table** on the ribbon or press **Alt + N+V** or click **Recommended Pivot Tables**



Choose the information to display in the Pivot Table

Excel creates the pivot table and places a set of **Pivot table Tools** on the ribbon. Use these to work with your pivot table.

The pivot table includes totals by default, but you can choose whether to include these or not- Use the **Grand Totals** button in the **Layout** section of the **Design** tab of the **PivotTable Tools**.

See your data in a different way

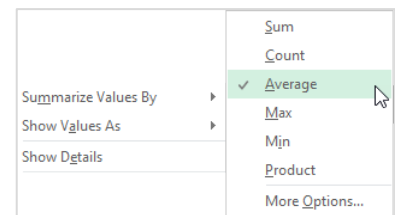
Pivot Tables are extremely flexible so if you want to change how your data is arranged, just click and drag the fields from one area of the field list pane to another. Excel will rebuild the pivot table and rearrange the data.

If you no longer want a field as part of the pivot table, drag it out of the field list area until you see a cross attached to your mouse then release the mouse button, or click the tick against the field name in the Field List at the right of the window to deselect it.



Change the calculation used to summarise your data

1. **Right-click** a summarised value in the pivot table.
2. Choose **Summarize Values By** from the shortcut menu to display a list of available functions.
3. Click the function you want to use to recalculate your data.

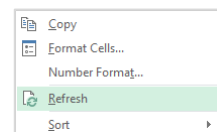


Note: by default Excel summarises numeric fields in pivot tables by *Sum* and text data by *Count*.

Refresh the pivot table

If you change any of the source data for your pivot table, the pivot table will not recalculate automatically. To reflect any changes you have made to the source data, you must refresh the pivot table.

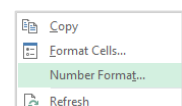
1. Make changes in the source data.
2. Click into the pivot table.
3. Right-click any cell in the pivot table, and choose **Refresh** from the shortcut menu. Alternatively, click the **Refresh button** on the **Analyze** tab of the PivotTable Tools on the ribbon.



Format the Pivot Table

By default, numbers (values) in the pivot table don't have any formatting, but you can use the Number Format command to set it.

- **Right-click** a *value* in the pivot table and choose **Number Format...** from the shortcut menu to access the Format Cells dialog box.



Drill down into a summarised value

1. Double-click a summarised value in the pivot table.
2. Excel creates a new sheet and places all the items that make up the summarised value into separate rows.

Note: the data on the new sheet is static, so won't reflect any later changes.