Excel - Summarise and Analyse Data with Pivot Tables

“What’s a Pivot Table and how do I use it?”

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.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Salary</th>
<th>Age</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stephanie</td>
<td>Corbett</td>
<td>£125,000</td>
<td>32</td>
<td>Female</td>
</tr>
<tr>
<td>Diane</td>
<td>Ford</td>
<td>£37,500</td>
<td>25</td>
<td>Female</td>
</tr>
<tr>
<td>Rose</td>
<td>Kirby</td>
<td>£25,000</td>
<td>26</td>
<td>Female</td>
</tr>
<tr>
<td>Frances</td>
<td>Holt</td>
<td>£70,313</td>
<td>38</td>
<td>Female</td>
</tr>
<tr>
<td>Anne</td>
<td>Beasler</td>
<td>£123,875</td>
<td>31</td>
<td>Female</td>
</tr>
</tbody>
</table>

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.

   - Click a cell within your block of data.
   - 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

Click Insert 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 on 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 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.

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 data* 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.

   **OR**

   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.