Information Technology Services

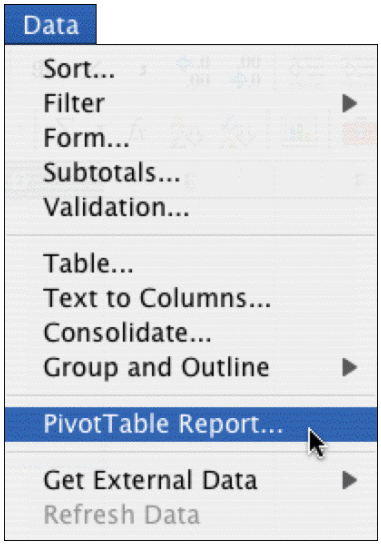
Excel 2004 for Mac: Pivot Tables
Learning Guide

Pivot Tables: An Overview

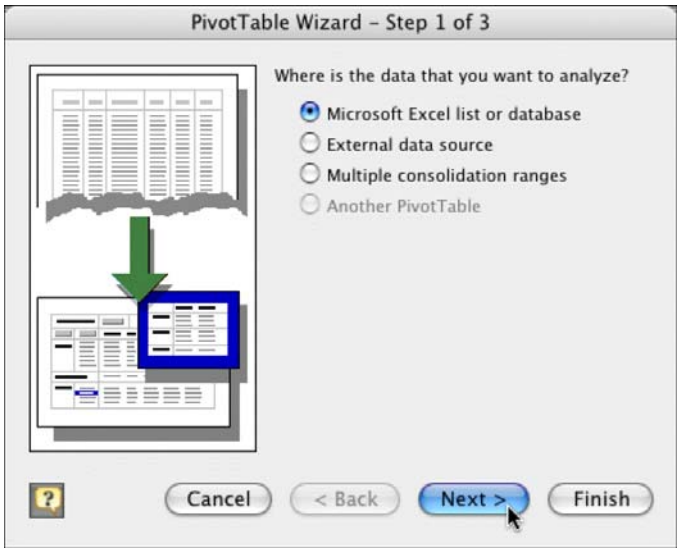
Often, you will want to summarize raw data that you collected or exported from a database. Although Excel's functions & formulas allow you to summarize and analyze data, creating a PivotTable allows you to summarize your data more quickly and with more flexibility.

Creating a pivot table

- Open the spreadsheet containing the data you wish to summarize.
- Click on any cell in the sheet.
- From the **Data** menu, select **PivotTable Report**.



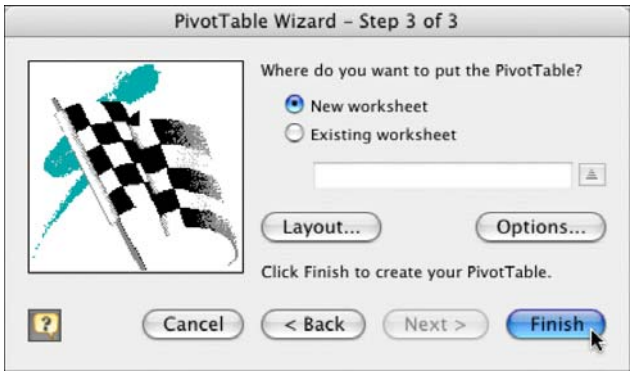
- The **PivotTable Wizard** window will appear.
- In Step 1 of 3, confirm that the option button labeled **Microsoft Excel list or database** is selected.
- Click on the button labeled **Next** to continue.



- The **PivotTable Step 2 of 3 Wizard** window will appear.
- Confirm that all the data you wish to include in your PivotTable is selected.
    - Check the cell range that appears in the box labeled **Range**. *This range should include all of the cells that contain data in your worksheet.*
- If all of your data for inclusion in the pivot table is not selected:
    - Highlight your data with the cursor.
    - The cell range of your data will appear in the box labeled **Range**.
- Click on the button labeled **Next** to continue.

Tip: *Excel will enclose the data you've selected in an animated, dotted border. Before continuing, scroll horizontally and vertically within your worksheet to make sure that all of your data is within the dotted border.*

- The **Pivot Table Step 3 of 3 Wizard** window will appear.
- Confirm that the option button labeled **New worksheet** is selected.
- Click on the button labeled **Finish** to create your PivotTable.



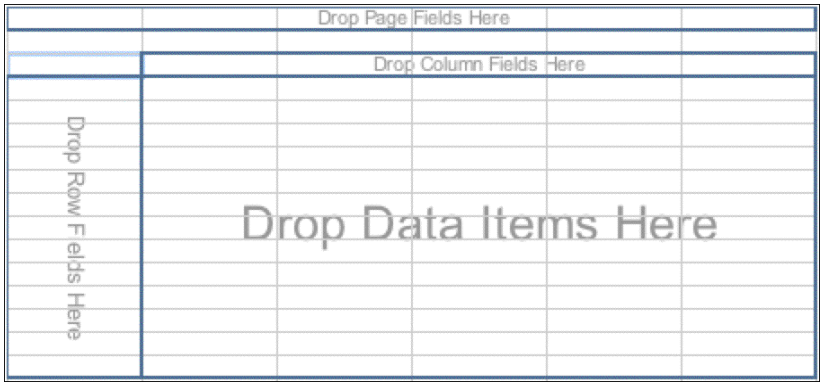
Tip: *In most cases, it will be easier to manipulate your PivotTable if you place it in a new worksheet. However, in some cases, you may wish to choose the* ***Existing worksheet*** *option button to place your PivotTable in the worksheet with your data for easier comparison.*

Customizing your PivotTable

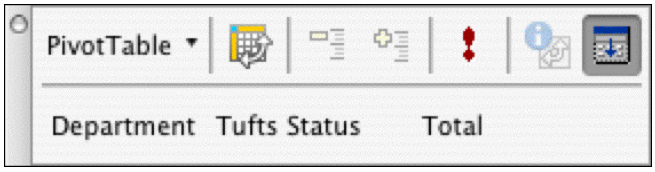
Adding data

Once you have created a PivotTable, you can add the data fields that you wish to use to summarize and analyze your data.

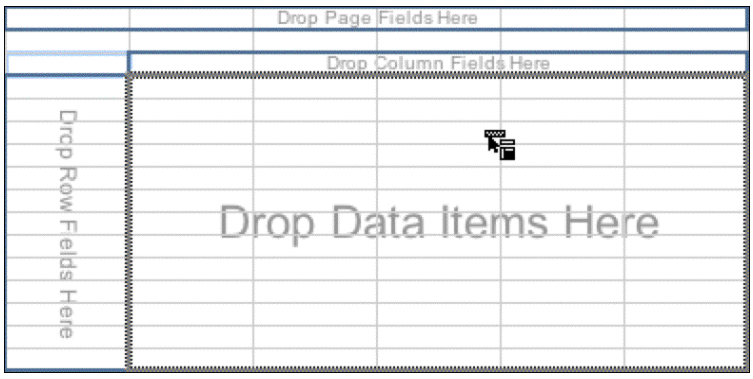
- When you view your PivotTable for the first time, it will not have any data in it.



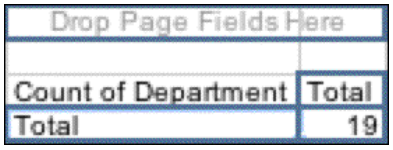
- The **PivotTable menu** will also appear with the name of each column header from your original spreadsheet. *The **PivotTable menu** allows you to easily add data fields to your table.*



- From the **PivotTable menu,** drag the name of the field you wish to add into the area of the PivotTable labeled **Drop Data Items Here**.
    - *In the example below, data from the **Department** field is being added to the data area.*



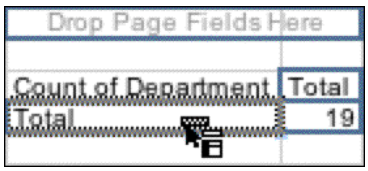
- After you add data to your PivotTable, Excel will summarize the data by calculating the number of rows that contain a data value for that field.



Adding data labels

Unfortunately, the default data summary in your PivotTable is not very useful without meaningful groups for your data. Adding data labels will help you better summarize and analyze your data. To add data labels:

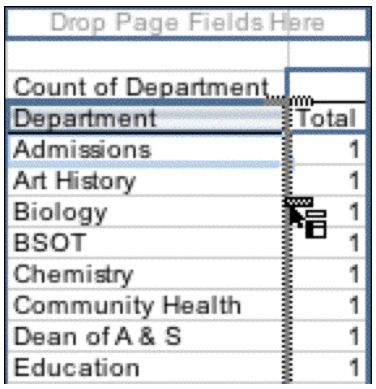
- Drag the name of the field that will supply your labels into the label area, currently labeled **Total**.
    - *In the example below, data from the **Department** field is being added to the label area.*



- Excel will display each unique data value in the field you added to the label area.
- Next to each label will be a count of the number of rows that contain that specific data value.
    - *In the example below, the label contains one row for each department represented in the original data.*
    - *Each row in the data area contains the number of times each department appeared in the original data. (In this example, each department appears once).*

Drop Page Fields Here	
Count of Department	
Department	Total
Admissions	1
Art History	1
Biology	1
BSOT	1
Chemistry	1
Community Health	1
Dean of A & S	1
Education	1
English	1
Fletcher	1
Grand Total	1
Health Service	1
Math	1
Nutrition/HNRC	1
Romance Languages	1
Student Services	1
TECnet	1
TIE	1
Tisch	1
Grand Total	19

- To group your data into subsections, drag a second field into the label area.
    - *In the example below, the grey vertical bar marks the location in the label area where your new field will be inserted.*



Drop Page Fields Here	
Count of Department	
Department	Total
Admissions	1
Art History	1
Biology	1
BSOT	1
Chemistry	1
Community Health	1
Dean of A & S	1
Education	1

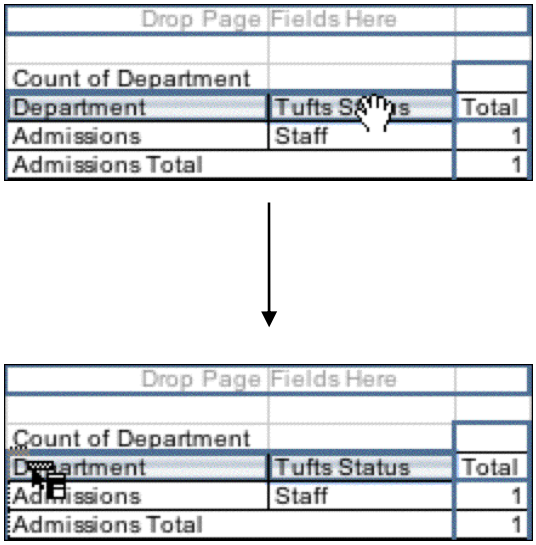
- After you insert your second field, Excel will group the data in each row based upon the data values from the field you just added.
    - *In the example below, every row now has one subgrouping by **Tufts Status.** Each of the original rows now features a subtotal displaying the total count from that row's department.*

Drop Page Fields Here		
Count of Department		
Department	Tufts Status	Total
Admissions	Staff	1
Admissions Total		1
Art History	Staff	1
Art History Total		1
Biology	Staff	1
Biology Total		1
BSOT	Faculty & Staff	1
BSOT Total		1
Chemistry	Faculty & Staff	1
Chemistry Total		1
Community Health	Faculty	1
Community Health Total		1
Dean of A & S	Staff	1
Dean of A & S Total		1
Education	Staff	1
Education Total		1

Reordering data groupings

In some situations, you may wish to change the order of the groupings for your data. PivotTables make it very easy to reorganize your data. For a field to serve as the primary group for your data, it must be the left-most field in the label area. Additional fields used for subgroupings should be arranged (from left to right, in the order in which you want to group your data) to the right of the primary field.

- Decide how you wish to rearrange your data.
  - *In the following example, if the intent were to find attendance patterns for faculty & staff, it might be more appropriate to group data first by **Tufts Status** and secondarily by **Department**.*
- To make a field the primary group for your data, place your cursor over the field you wish to serve as the primary field. The cursor will change into a hand.
- Click and drag the field to the left edge of the labels area.
  - *In the example below, **Tufts Status** is being dragged to the left side of the label area, making the field the primary group for the data in the table. Once the **Tufts Status** field has been moved, the **Department** field then provides subgrouping information.*

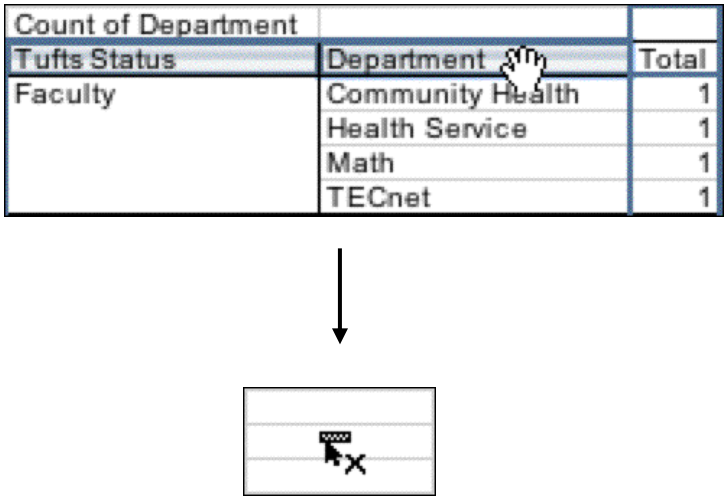


***Tip:** To change a primary field to a subgroup instead of a major group, drag its field name to the right side of the label area.*

Removing data from a PivotTable

Sometimes, you will need to remove data labels to simplify your table's presentation or to allow the patterns in your data to be more obvious. To remove data labels:

- Place your cursor over the field name that you wish to remove from your table.
- Drag that field out of the Pivot Table until the cursor appears with an X next to it.
- Release your mouse button and Excel will remove the selected label from your table.

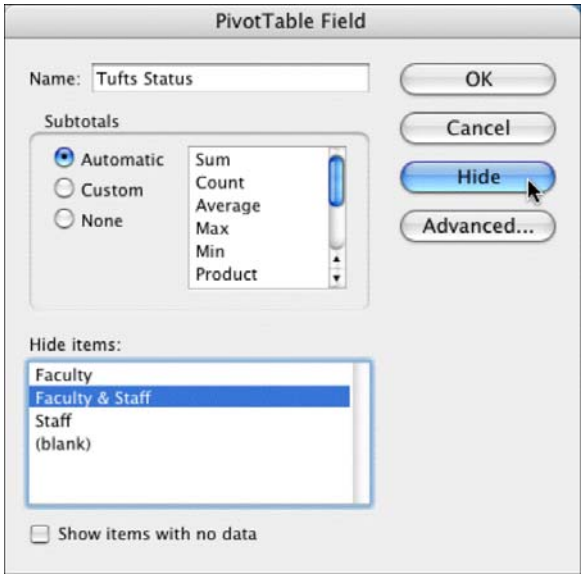


Count of Department		
Tufts Status	Department	Total
Faculty	Community Health	1
	Health Service	1
	Math	1
	TECnet	1

Displaying only part of your data

In many cases, you will want to display only data in your table that meets certain conditions, or hide data that's associated with one of the labels in the labels area. To display only a subset of your data:

- Choose the data that you wish to hide in your table.
    - *In the example below, we will hide all data associated with faculty and staff using the **Tufts Status** data field in the labels area.*
- Double click on the field name whose data you wish to hide.
- The **PivotTable Field** window will appear.



- Select the items whose data you wish to hide in the box labeled **Hide items**.
- Click on the button labeled **Hide** to confirm the change to your table's layout.