

1.3.2 Charting the Parent Category

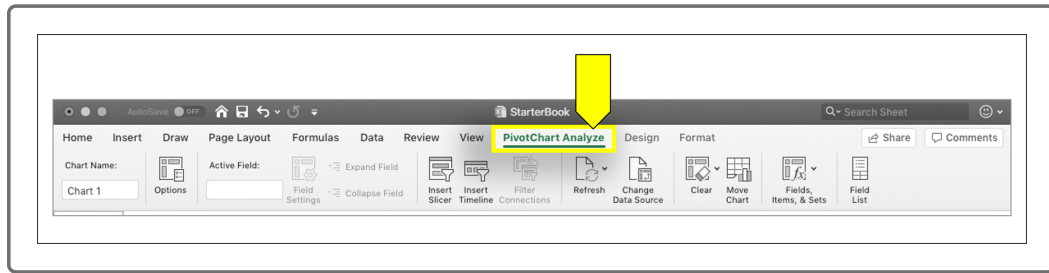
To provide Louise with a visual summary of the data in our pivot tables, we need to add visualizations using the same data.

Pivot Charts

Pivot charts complement pivot tables by using table data to create visualizations such as bar charts and line graphs. Visualizations aid in uncovering a link or trend, especially when a table isn't able to.

Return to your pivot table and name the sheet it's currently in "Category Statistics." Let's add a visual representation of the data next by following these steps:

1. Click anywhere on the pivot table to bring up the PivotTable Analyze tab, and then click it.

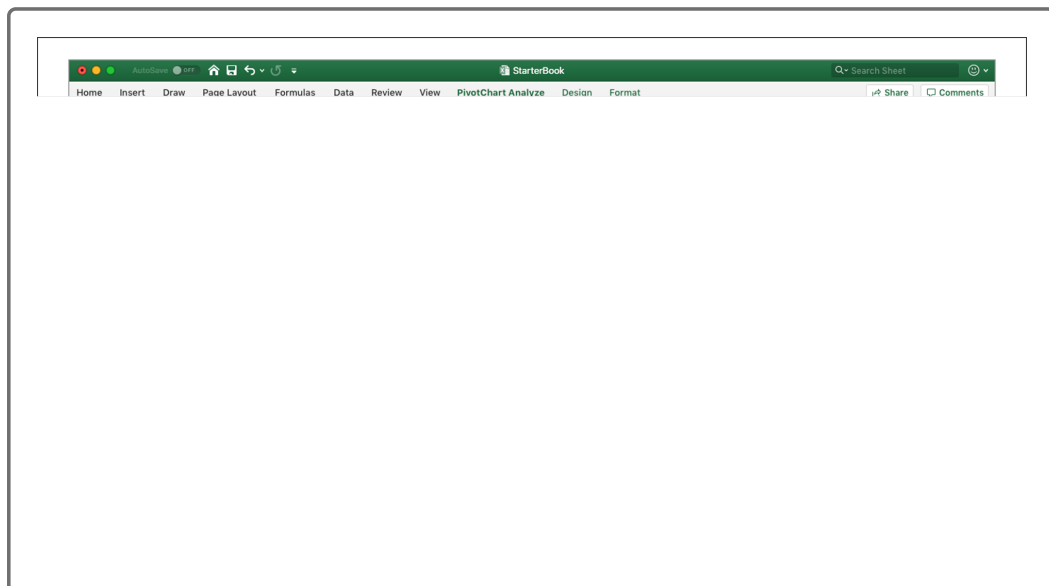


2. Click the PivotChart button, located in the Tools group on the ribbon.



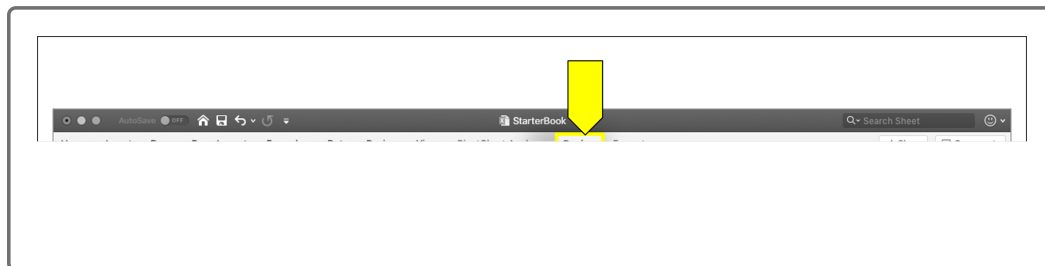
When this button is clicked, Excel will automatically choose a chart based on the table data, which in our case is a clustered column. Depending on your version of Excel, your chart may be automatically added. If it is not automatically added, click "OK" to add the chart to the sheet.

Resize the chart as needed by dragging the corner out from the center of the image.



This bar chart is great, but it can be improved even further by changing it to a stacked bar chart.

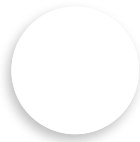
3. Click on the chart, and then click the Design tab on the toolbar.



4. Click the Change Chart Type button, and then select Stacked Column Chart from the pop-up menu.



This is a great chart. Each category has a single bar that tells us the same information as the table. Even better, this chart is just as interactive as the table it's linked to. If we change a filter, the table will automatically update itself to reflect the new data. Additionally, information is displayed in a small box when we hover our mouse over a column.



Calculating score. This might take a while. Please wait...

Your assignment has been successfully submitted.

You may close this window or continue to wait for your final summary.

We're not quite done yet, though. It's a good practice to give visualizations a title to link the chart to specific data. This way, if we revisit the image after not working directly with the data for any length of time, the title will remind us of what the data represents.

Add a title to your bar chart by completing the following steps:

1. Return to the Design tab and click Add Chart Element on the left side of the toolbar.
2. From the pop-up menu, select Chart Title followed by Centered Overlay.

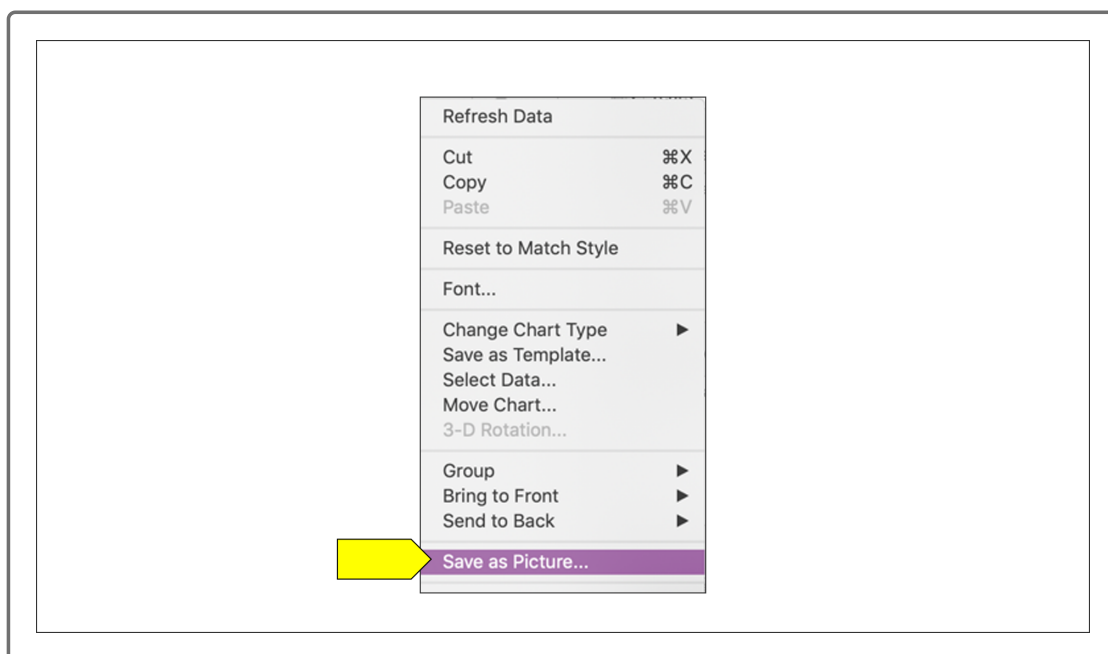


A text box with Chart Title will appear at the top of your chart. Enter a new name by double-clicking the placeholder text and typing in your own title, such as Parent Category Outcomes.

Now that we have a chart with a title, let's save it as an image to use in our report later. We'll be giving Louise a report of our findings when we're done, complete with images of our analysis. It's good to save images as we go; this way, we won't need to retrace our steps to save them later.

macOS

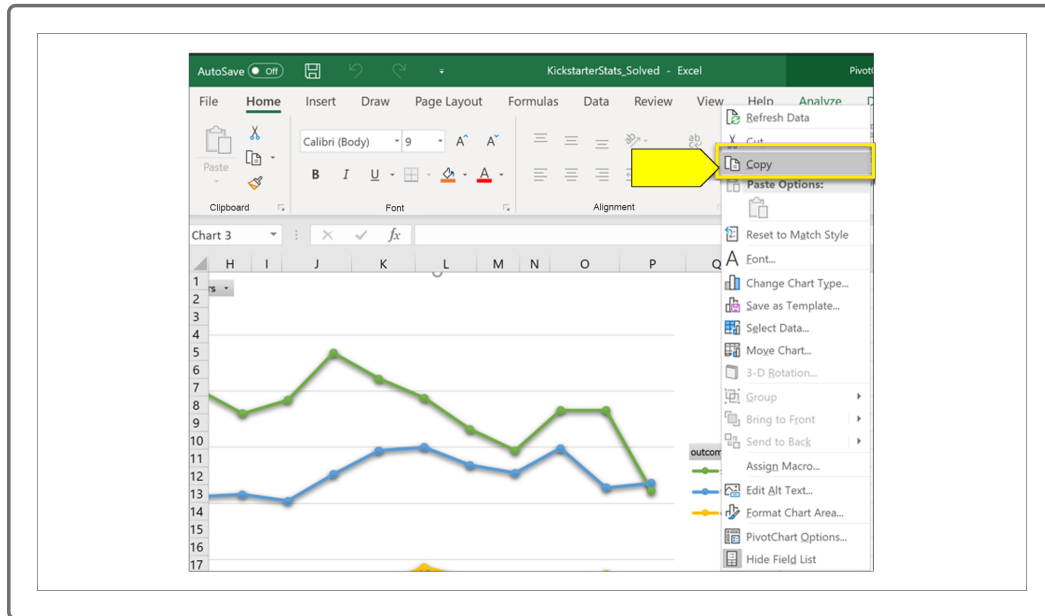
To save an image of your chart, select the chart by clicking anywhere on it. Then right-click and select "Save as Picture."



Windows

The steps below outline how to save an image of a chart (the chart in the image may not match the chart you have created or are trying to save).

1. Right-click the image and select "Copy" (or use the CTRL+C keyboard shortcut).



2. Open a graphics editor, such as Microsoft Paint, and paste the image using the Paste function from the ribbon or by pressing CTRL+V on your keyboard.



3. There may be excess white space around your chart. To trim it, use the Select tool to select only the chart.



4. Click the "Crop" button.

5. Save your image by clicking "File" followed by "Save as," and then select "PNG picture." Save this new image in the same directory as the data file. We'll need to access it later to add it to our report.

This new chart is really informative. We can easily see which parent categories performed well and which ones did not. But what about subcategories? Louise is going to create a play, not build a theater. Let's create a new pivot table and pivot chart, but this time we'll filter by subcategory.

Chart the Subcategories

Let's make another chart, this time using subcategories. We're using subcategories in order to focus our analysis on an area that is more relevant for Louise: theatrical productions. We'll follow a process similar to the one used to create the original chart using the parent categories, but this time we'll create a chart and pivot table at the same time. Return to the original Kickstarter spreadsheet to get started, and then follow these steps:

1. Click the Insert tab.
2. Click the PivotTable button.
3. Keep the default range selection and place the PivotChart in a new worksheet. Click OK.

Tip: The default range includes the entire worksheet, unless there is already a highlighted section. Make sure there are no sections highlighted before completing this step.

4. Name the new sheet Subcategory Statistics and relocate it to the right-most sheet tab (if it isn't there already).
5. Drag and drop the following:
 - Country and Parent Category to Filters
 - Outcomes to Columns
 - Subcategory to Rows
 - Outcomes to Values

Note: In some later versions of Excel, Outcomes should be dragged to "Legend (Series)" and Subcategory should be dragged to "Axis (Categories)."

6. Click the PivotTable Analyze tab and then click PivotChart.
7. Click on the graphic to make sure it is selected, then click the Design tab at the top of the screen and select Change Chart Type. Choose Column followed by Stacked Column.
8. (Optional) Customize the chart colors and grid.

The grid is made up of horizontal (and sometimes vertical) lines that help us quickly measure the data being displayed. This can be customized in Excel to change the line style or even remove them completely.

What do you notice? This new pivot chart looks almost exactly like the first one we created and has the same functionality. Let's now filter this chart by country to see if the origin of the campaign has an impact. First, select the "US" and take a look at the statistics.

Now we know from our initial look at the data that the total number of Kickstarter campaigns is just over 4,000. You can double check this number by looking at the Grand Total on your pivot chart. By filtering for just the "US", the number of campaigns is adjusted to 3,038. We can see

this number in the Grand Total row of the table. Next, update the filter to show Great Britain's statistics.

FINDING

We have found that while there are only a total of 604 Kickstarter campaigns for plays in Great Britain, the "theater" category is the most successful.

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