Excel Charts

Run for Life

You are a volunteer with MSA Friends, a non-profit organization committed to providing support and programs to benefit victims of multiple sclerosis. A major fundraiser is the annual Run for Life, a 5K run held each April. Participants from the six-county area served by MSA Friends collect pledges and donations each spring. MSA Friends is applying for a grant to support educational programs and as part of the application process, must supply data on community involvement as evidenced by past donations to the 5K run. Because you have experience in Excel 2010, you have been asked to collect donation data and to summarize it in an Excel workbook.

Chart Basics

You have a large number of donations to chart so you decide that a clustered column chart would be the most appropriate.

1. **Create a Clustered Column Chart**

a.   Open *script_donations*, and then save it as **script_donations_solution**.

b.   Select the **range A4:F10**.

         You included the Average column in your selection. Although you should not mix aggregate data and values in a chart, doing so now will enable you to illustrate later how to modify a chart by changing data selection.

c.   Click the **Insert tab**, click **Column**, and then select **2D Clustered Column**. Save the workbook.

2. Change the Chart Position and Size

a.   Drag the chart so that the top-left corner of the chart appears in **cell A13**.

b.   Resize the chart so that it extends to **cell H28** at the bottom-right corner.

c.   Save the workbook.

3. Create a Pie Chart

a.   Select the **range A5:A10**, the range containing county names.

b.   Press and hold **Ctrl** as you select the **range E5:E10**, 2012 donation data.

c.   Click the **Insert tab**, click **Pie**, and then select **2D Pie**. Drag the chart so that the top-left corner appears in **cell J13**.

d.   Click the **Format tab** (a subtab of the Chart Tools contextual tab), and then change the chart height to **3.25″** and the width to **4.5″**.

e.   Save the workbook.

4. Explode a Pie Slice

a.   With the pie chart still selected, click any piece of the pie. All pie slices should be selected.

b.   Click the **Madison County slice**. Drag the slice away from the pie a little bit. Save the workbook.

5. Change Worksheet Data

a.   Change the value in **cell E6** to **6200**. Change the value in **cell E8** to **950**.

   Both charts will change slightly to reflect the modified data.

b.   Save the workbook. Keep the workbook open if you plan to continue with the next step. Otherwise, close the workbook.

Chart Design

You will use the Design tab (a subtab of the Chart Tools contextual tab) to change the appearance of both charts. You will also move the pie chart to its own worksheet.

1. Move a Chart

a.   Open *script_donations_solution*, if necessary*.*

b.   Select the pie chart. Click the **Design tab**, and then click **Move Chart** in the Location group. Move the chart to its own worksheet. Name the new sheet **Pie Chart 2012**.

c.   Save the workbook.

2. Apply a Chart Style and Chart Layout

a.   Click the **More button** in the Chart Styles group, and then select **Style 42**.

b.   Select **Layout 1** in the Chart Layouts group.

c.   Select the **chart title placeholder**, and then type **2012 Donations**. Press **Enter**.

d.   Save the workbook.

3. Change the Data

a.   Select the **County Donations worksheet**.

b.   Select the clustered column chart. Click the **Design tab**, if necessary.

c.   Click **Select Data** in the Data group.

d.   Click **Average** in the **Legend Entries (Series) list**.

e.   Click **Remove**, and then click **OK**.

f.   Click **Switch Row/Column** in the Data group.

g.   Drag the middle-right sizing handle to extend the chart to the end of **column J**. Save the workbook.

4. Change the Chart Type

a.   Click the **Design tab**, and then click **Change Chart Type** in the Type group. Click **Stacked Column**. Click **OK**.

b.   Resize the chart so the right side stops at the end of **column I**.

c.   Save the workbook.

5. Insert a Sparkline

a.   Type **Trends** in **cell G4**. Use **FormatPainter** to apply the styles from **cell F4** to **cell G4**, and then click **cell G5**.

b.   Click the **Insert tab**, and then click **Line** in the Sparklines group. Select the **range B5:E11** to enter it in the **Data Range box**. Enter the **range G5:G11** in the **Location Range box**. Click **OK**.

c.   Click the **More button** in the Style group on the Design tab (a subtab of the Sparkline Tools contextual tab), and then apply **Sparkline Style Accent 1, Darker 25%**.

d.   Click **High Point** in the Show group. Click **Marker Color** in the Style group, point to **High Point**, and then click **Red**.

e.   Save the workbook.

5. Print a Chart

a.   Deselect the sparklines.

b.   Click the **File tab**, and then click **Print**. Click **Print**.

c.   Click the **Pie Chart 2012 worksheet tab**. Click the **File tab**, and then click **Print**. Ensure that the chart would print on one page. Click the **Home tab**.

d.   Save the workbook. Keep the workbook open if you plan to continue with the next step. Otherwise, close the workbook.

Chart Layout

You want to enhance the column chart by using some options on the Layout tab (a subtab of the Chart Tools contextual tab) to add the final touches.

1. Add a Chart Title

a.   Open *script_donations_solution (If necessary)*, if you closed it at the end of the last step.

b.   Select the stacked column chart. Click the **Layout tab**, click **Chart Title**, and then select **Above Chart**.

c.   Type **MSA Donations by County** and press **Enter**.

d.   Click the **Chart Elements arrow** in the Current Selection group, and then select **Chart Area**.

e.   Copy the selection, and then paste it to **cell A32**. Click the **Design tab**, and then click **Change Chart Type** in the Type group. Select **Clustered Column**, and then click **OK**.

f.   Save the workbook.

2. Add and Format Axis Titles

a.   Make sure the clustered column chart is selected, and then scroll so that you can view the entire chart.

b.   Click the **Layout tab**, click **Axis Titles** in the Labels group, point to **Primary Vertical Axis Titles**, and then select **Rotated Title**.

c.   Type **Amount of Donations** and press **Enter**.

d.   Select the stacked column chart, click the **Layout tab**, if necessary, click **Axes**, point to **Primary Vertical Axis**, and then select **Show Axis in Thousands**.

e.   Click **Thousands** to select it, type **Thousands of Dollars**, and then press **Enter**.

f.   Drag the **Thousands of Dollars label** down to appear vertically centered with the value axis increments. Save the workbook.

3. Add Data Labels

a.   Select the clustered column chart, click the **Chart Elements arrow** in the Current Selection group, and then select **Series "Madison"**.

b.   Click **Data Labels** in the Labels group, and then select **Outside End**. Note that the 5,600 data label is on a gridline. Click the **5,600 data label** twice, pausing between clicks.

c.   Click the outer edge of the 5,600 data label border, and then drag up slightly to move the label off the gridline.

d.   Save the workbook.

4. Apply Fill Colors

a.   Make sure the clustered column chart is still selected, click the **Chart Elements arrow**, and then select **Series "Mobile"** or click one of the **Mobile columns**.

b.   Click **Format Selection** in the Current Selection group.

c.   Click **Fill**, and then select **Solid Fill**. Click **Color**, click **Aqua, Accent 5**, and then click **Close**.

d.   Click **Plot Area** in the Background group, and then select **More Plot Area Options**.

e.   Click **Gradient Fill**, click **Preset Colors**, click **Wheat**, and then click **Close**.

5. Insert a Trendline

a.   Make sure the clustered column chart is still selected. Click **Trendline** in the Analysis group, and then select **Linear Trendline**.

b.   Click **Lauderdale**, and then click **OK**.

c.   Save and close the workbook.