Charts & Graphs in Excel

Exercise 1 – Column chart

1. Go to the Attendees sheet
2. Select Row 1 and Row 14 (click and hold the Ctrl key as you select both rows)
3. Go to Insert and select Recommended Charts and go with the first suggested chart type – a Clustered column chart
4. Add a Chart title (double click on 'Total' and overwrite)
5. Deselect the Primary vertical axis (click on the chart and then the Plus sign, hover on Axes, click on the arrow and deselect)
6. Add Data labels (check the box)
7. Deselect Gridlines
8. Change the colour of the columns to dark blue (double click on one of the columns to select them all and the Format data series side bar should appear at the right. Now select the Paint pot icon at the top and click on the drop down arrow to change the default colour)
9. Now make data labels to appear within the columns(click on the plus sign, hover over Data Labels and click the arrow. Select 'Inside End'
10. Change font colour to white for contrast (double click on the figure in the column to select all and the Format data labels side bar should appear. Select Text options at the top and click on the Paint pot to choose white)
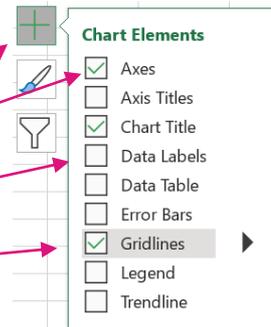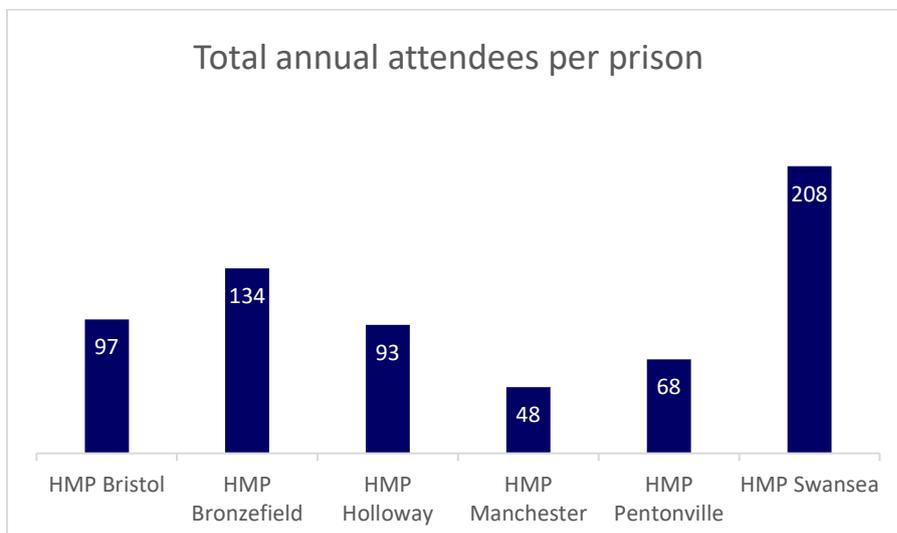
Exercise 2 – Pie charts

1. Go to the Enjoyment sheet
2. Highlight the summary data table
3. Insert chart and this time choose the Pie chart from the Recommended Chart suggestions
4. Now add data labels and change these to percentages (click on the plus sign, select Data labels and hover and click on the arrow. Now choose More options and the Format Data Labels side bar should appear. Now select Percentage and deselect Value.
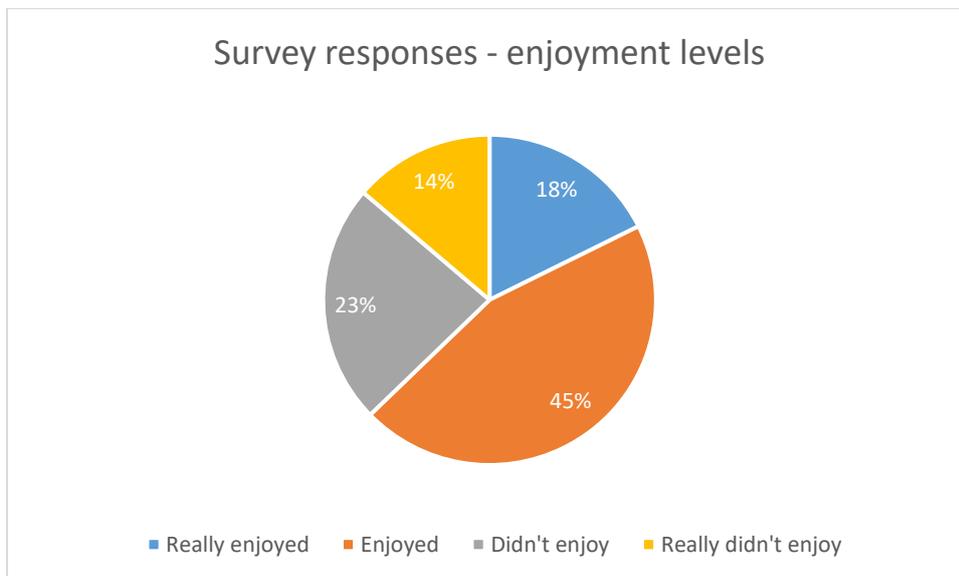
Extra options

- Now change your Data labels to be the Call out option
- Deselect the Legend

Exercise 3 – Line charts

1. Go to the Sessions tab and select your 2017 data
2. Create a Line chart – Insert tab and suggested chart
3. Now click on the chart, then click on the Paint brush option (to the right) and scroll through the Style options in the top menu and select a chart with month points marked out with a circle
4. Now click on the chart and in the Chart design tab, choose Select data to change the Pie data range you want to visualise to a comparison of all 3 years (highlight the whole data range to include the 2018 & 2019 columns of data)

5. Change the vertical access so it starts at 40 and finishes at 110 (*Click on the axis values and then change the Axis Options / Bounds Minimum and Maximum values*). Change the units from 10 to 20.
6. Add a Legend underneath the chart (click on the chart, and the Chart Elements + icon, Select Legend and click on the arrow to then choose Bottom from the options displaying)
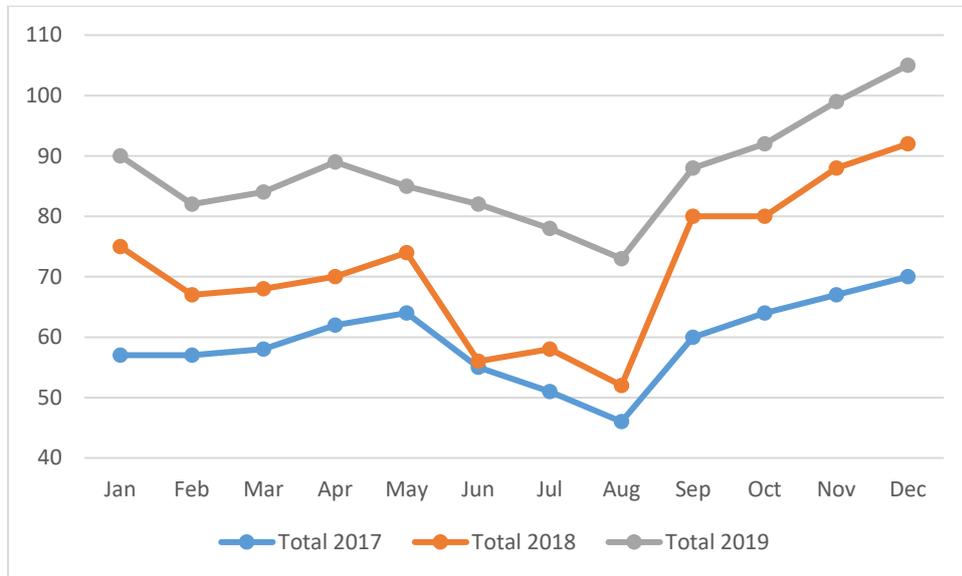
What patterns in the data can you see?

Exercise 4 – Pivot charts

1. Go to the Pivot sheet
2. Click in the Pivot table and then select the Pivot table analyse tab
3. Click on Pivot chart and select the suggested option
4. What's good & bad about this visualisation?
5. Delete the chart
6. Now drag Satisfaction rating from the Row to the Column area (*in the right hand side Pivot table fields*)
7. Now create a Pivot chart. Is this a better visualisation? Why?
8. Filter to exclude HMP Swansea
9. Add a Chart title
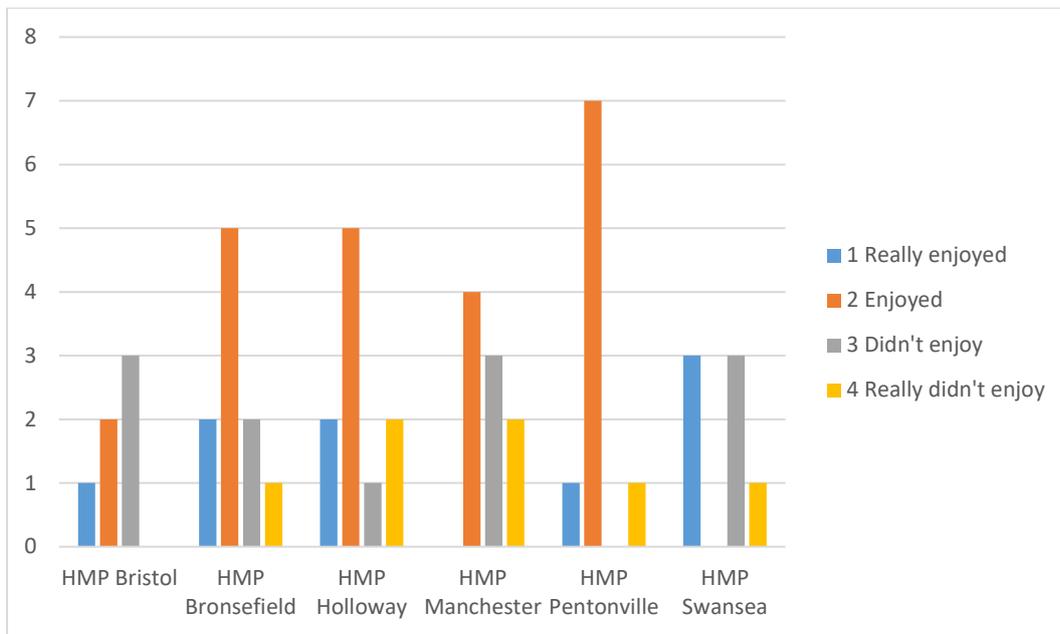
Exercise 5 – Dashboards

1. Go to the Dashboard sheet
2. Copy and paste the charts you've already created onto the dashboard sheet and arrange to tell a story
3. Add a Title and some narrative (*Insert text box*) to explain an element of a chart
4. Remove gridlines from the view (*Page layout and uncheck Gridlines for the View option*)