## Building Charts \& Graphs in Microsoft Powerpoint and Word

Powerpoint (it's basically the same in Word):

Start by watching this 1-minute overview from Microsoft: https://www.microsoft.com/en-us/videoplayer/embed/RWO16P?pid=ocpVideo0-inner div-oneplayer\&postJsIIMsg=true\&maskLevel=20\&market=en-us

To insert a chart:

1. Click Insert > Chart.

2. In the worksheet that appears, replace the placeholder data with your own information.

3. When you insert a chart, small buttons appear next to its upper-right corner. Use the Chart Elements + button to show, hide, or format things like axis titles or data labels. Or use the
Chart Styles button to quickly change the color or style of the chart.

Tip: The Chart Filters button is a more advanced option that shows or hides data in your chart.
5. When you've finished, close the worksheet.

## Assignment:

Open a blank Powerpoint. (we're doing this assignment in PPT but it works basically the same way in Word).

Create a title page with your name on it.

On the second slide, add a line graph using the following data:

| DATE | CAPACITY | DEMAND |
| :---: | :---: | :---: |
| $2019-04$ | 29,263 | 46,193 |
| $2019-05$ | 28,037 | 49,131 |
| $2019-06$ | 21,596 | 50,124 |
| $2019-07$ | 25,895 | 48,850 |
| $2019-08$ | 25,813 | 47,602 |
| $2019-09$ | 22,427 | 43,697 |
| $2019-10$ | 23,605 | 41,058 |
| $2019-11$ | 24,263 | 37,364 |
| $2019-12$ | 24,243 | 34,364 |
| $2020-01$ | 25,533 | 34,149 |
| $2020-02$ | 24,467 | 25,573 |
| $2020-03$ | 25,194 | 25,284 |

Things to be aware of while working in excel pop up box:

- Drag the blue box to incorporate the columns you have data for (it defaults to 3 series of data, you only have one here).
- You'll want to right click in the cells with data, click "format cells" and change the data format to number, no decimal places and check the box for using the 1000 Separator (,).

Add a chart title: "Demand and Capacity by Month"
Add a data table to your chart.
Change the demand line from orange to green.

Add a 3rd slide.

Add a new chart, this time a clustered bar chart, using this data:

| Employee Feedback |  |  |
| :--- | ---: | ---: |
|  | Percent Favorable |  |
| Survey Category | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| Culture | $80 \%$ | $96 \%$ |
| Peers | $85 \%$ | $91 \%$ |
| Work environment | $76 \%$ | $75 \%$ |
| Leadership | $59 \%$ | $62 \%$ |
| Rewards \& recognition | $41 \%$ | $45 \%$ |
| Perf management | $33 \%$ | $42 \%$ |
| Career development | $49 \%$ | $33 \%$ |

Make sure your figures are represented as percentages.
Change chart title to "Employee Feedback Over Time."

Looking at the chart, it's not easy to see where the changes are. Be sure to add data labels making it easier to read the data.

Duplicate the slide (this is slide \#4).

I'm not sure this clustered bar chart is ideal. Let's change the chart type to a clustered column chart. There....that's much easier to interpret.

Change the 2014 bars so they are black. Change the 2015 bars so they are green. Remove the grid lines.

Add a new slide (\#5). Insert a pie chart using the following information:

2021 US Auto Sales:

| Toyota | $1,907,321$ |
| :--- | :--- |
| Ford | $1,804,793$ |
| Chevrolet | $1,468,889$ |
| Honda | $1,308,476$ |
| All Others | $8,462,701$ |

Add data labels (it's hard to see how big each slice is without them!). Even with the data labels showing, it's not easy to understand what each slice represents.
Now format the data labels further (go into more options under data labels). Under label options, deselect "value." Select "category name" and "percentage." Remember: a pie chart should always add up to $100 \%$ (the whole point of a pie chart is to show what part of the whole something makes up).

Since we're not showing the category name, remove the "legend".

Change the chart title to "US Auto Market Share by Top Makes - 2021."

What share of total auto sales do the top 4 makes represent? Add a callout on the slide that shows this.

If you've made it this far, you're done. You should have 5 slides. Be sure you've completed all of the steps. Hopefully, you feel more comfortable building graphs in PPT.

