how to build an interactive Excel dashboard in three easy steps

Use Stocks.xlsx it’s located in the Github repository

You’ll notice that it’s got two copies of the same spreadsheet.

One cool thing abut Microsoft Excel is that it can gather stock prices, so you can write your own stock trading application and you don’t have to pay a service for the data.

Four of the columns have data from fixed dates. I tried to get the end of the month, but there is no trading data for the weekends, so I had to massage the dates somewhat. The final column will depend on what date the spreadsheet is run on.

Sometimes getting the data to update in the spreadsheet is problematic, so I copied and pasted it below to make sure it works. The top data range is live data and it will update automatically.

Just to make sure this works, I have also cut and pasted the same data as literal values in a second data range.

We're going to use this to make a simple dashboard from Excel using this spreadsheet as our data source

At this point, according to Excel, this data is considered a range of data or a range of cells

You can convert the data into a table using Insert -> Table

If you convert the cell range to a table, you get consistent formatting and sorting.

Tables also offer slicing capability, which is selecting out specific portions of the data.

Personally, I prefer to use data ranges, rather than tables. To pull the data out of a table and make it a data range select any cell in the table, then use

if your dashboard requires more tables that’s no problem, it works the same way.

Now, let’s make a chart

1. If you’re using a table, select any cell
2. If you’re using a data range, select all the cells.
3. Insert pivot chart
   1. The first thing it wants to know is where's our data range and that's automatically selected because we selected any cell within our data table
   2. The next thing it wants to know is where do we want to put the pivot chart
      1. We're going to put it on the existing worksheet
4. Browse over to it and pick a cell
5. Click okay
   1. Now there's an underlying pivot table and a pivot chart and basically the pivot chart displays the values in this pivot table and after we're done with our plot
   2. This shows the relative average costs of each of the stocks.
6. Pick average
   1. You can check out these other options
7. Click okay
   1. Now you can see the pivot table shows the summary and the pivot chart displays the values in the pivot table so these are linked
   2. If we don't need to see the pivot table we can just drag the graph over the table and hide it
8. Make another sheet named Dashboard
9. Write “Dashboard” in large letters in cell A1
10. Copy and paste the bar chart onto the sheet named Dashboard
11. Now let’s see the how these stocks performed over time using a line chart
12. Go back to our data source
13. Insert pivot chart
14. Existing worksheet
15. pick a cell
16. Click okay
17. Slide it to the right a little bit so once again we have a pivot chart and an underlying pivot table.
    1. To see the trend over time
18. Insert date and score now
    1. (by default this is a column chart)
19. Change the chart type by going to Design -> Change Chart Type
20. Pick Line
21. Click okay

1. Next, we want to resize these
2. To resize them to the same size, group select the charts
3. Click on one,
4. Click on Shift and click the other
   1. This will allow me to make both graphs any aspect ratio I want.
5. Resize them together the way that we do that is select the first chart hold down the shift key select the next chart now if I already just click and drag you can see I can make this any aspect ratio I want I'm going to undo but if we hold down the shift key while using this click and drag the aspect ratio is locked in the
6. To change the alignment for example go to Shape Format -> Align Top
7. Delete a couple of columns to move the graphs closer together
8. Apply some formatting
9. Minimize the chart junk (Cognitive Load) these are all the excess details that don't really contribute to the chart.
10. To get rid of these excess buttons
    1. Select the chart Pivot Chart Analyze
    2. Hide all field buttons
    3. Remove the Legend by clicking the plus button in the upper right
    4. Untick Legend
    5. Remove the grid lines
    6. Update the Title
11. Now, you should be able to publish your first dashboard by saving it in OneDrive.
12. It’s not elegant, but it’s free.
13. You can do a lot to make it look better,
14. Another disadvantage of this kind of a dashboard is that because it’s based on Excel, it isn’t automatically updating. Next time, we’ll do the same thing with PowerBI, which will allow us to have automatically updating information.
15. This week, Please install the freeware version of PowerBI (If you don’t already have access to PowerBI somehow else.
16. To make these charts easy to filter
17. Filter
    1. These charts support a variety of different filters including slicers and a timeline so
18. Select a chart
19. Go to Pivot Chart Analyze
20. We could use a slicer if we wanted to filter by a category column such as region
21. We want to filter by date so click the timeline tool
22. Select the date field
23. Click a single period and this chart updates
24. and in a minute I'm going to show you how to connect this slicer to this chart as well so we can click any individual period or we can click and drag to select multiple periods currently the period is months but there's other options so you can check those out now let's connect it to this chart as well what we do is we select the timeline and we simply click report connections and this is basically saying when I interact with the filter what underlying pivot tables will be filtered currently there's only one we want this one as well so we check it and click okay when we interact with the timeline both charts are updated let's do January to February let's do January to March
25. Select January to April
26. Note: This timeline does not need to stay on this sheet. We can use a standard cut and paste to move it
27. Adding new data
28. Go back to the data source and add 1014 it happened on May 2nd 2030 for the North Region and they got an eight
29. To get this new data into the dashboard
30. Go over to the dashboard
31. Click data refresh all now those pivot tables were refreshed with the new survey data it's not reflected in these charts because of the timeline
32. Go to the timeline select January through May and now the graphs include May as well
33. This is still on sum and not average
34. To fix that:
    1. Select the chart
    2. Turn on the field list instead of sum of score
    3. Go back to Value field settings s
    4. Select average
       1. (Check out these other options)
    5. Click okay
    6. Close this