

30 Tips for Better Charts

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Contents

About the Author	3
Preface	4
Less is More - KISS.....	5
Know Your Audience.....	6
Formatting	7
Excel Formatting Shortcuts.....	12
Reporting Mastery	13
Mynda's Excel Dashboard Course	13
Mynda's Power BI Course.....	13
Resources.....	14
Jon Peltier's Chart Utilities	14
Edward Tufte	14
Stephen Few.....	14
Disclosure	15

About the Author

Mynda Treacy first experienced the power of spreadsheets with Lotus 1-2-3 and has been using Excel since 1995.

In 1999 Mynda qualified as a Management Accountant in London where she was the Global Financial Controller for the Information and Technology department of a multinational investment bank.

In 2010 Mynda co-founded www.MyOnlineTrainingHub.com to pursue a passion for Excel and the desire to help others get more out of it.

Every year since 2014 Mynda has been awarded Microsoft MVP for her contribution to the Excel community and has since helped thousands of people overcome their Excel challenges, and all from her desk on Queensland's Sunshine Coast, Australia.

On her website, she publishes a weekly Excel newsletter that features step-by-step tutorials and accompanying videos. Additionally, Mynda offers several online courses, on topics including Excel Dashboards, Power BI, advanced Excel and more.



Preface

I see the same innocent mistakes with charts and data presentation over and over again. And a lot of them are easily avoided.

In this book I share with you 30 easy to action tips on how to create better charts in Excel and the common pitfalls to avoid.

I'm a big fan of data visualisation pioneers Edward Tufte and Stephen Few. For without their teachings on data visualisation and dashboard design I would most likely be making those same mistakes.

I am grateful to Excel Chart Gurus like Jon Peltier and The Frankens Team who give me inspiration (and solutions) for what can be achieved with an Excel chart that goes way beyond what Microsoft had intended.



Less is More - KISS

1. Just because Excel has loads of fancy formatting doesn't mean you have to use it all (figure 1). Leave out the 'chart junk'. Formatting like bevelled edges, gradient fills, 3D effects, multiple-colours and bold colour schemes merely act as a distraction to the reader.

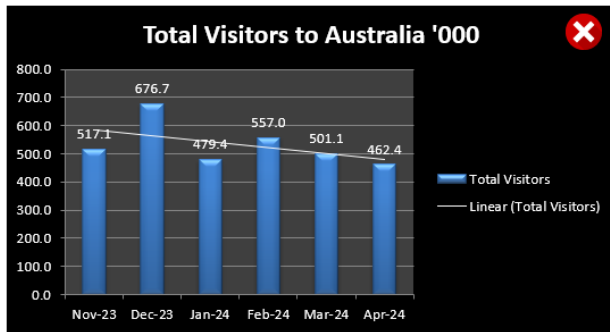


Figure 1 Gangnam Style Chart

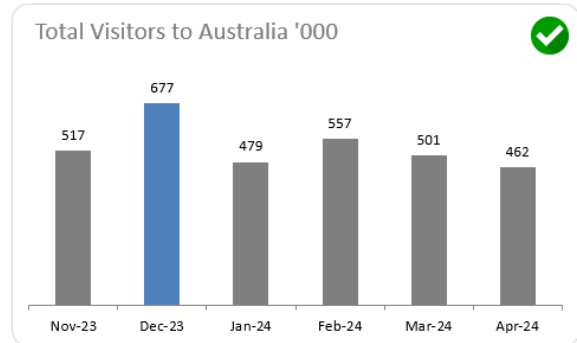
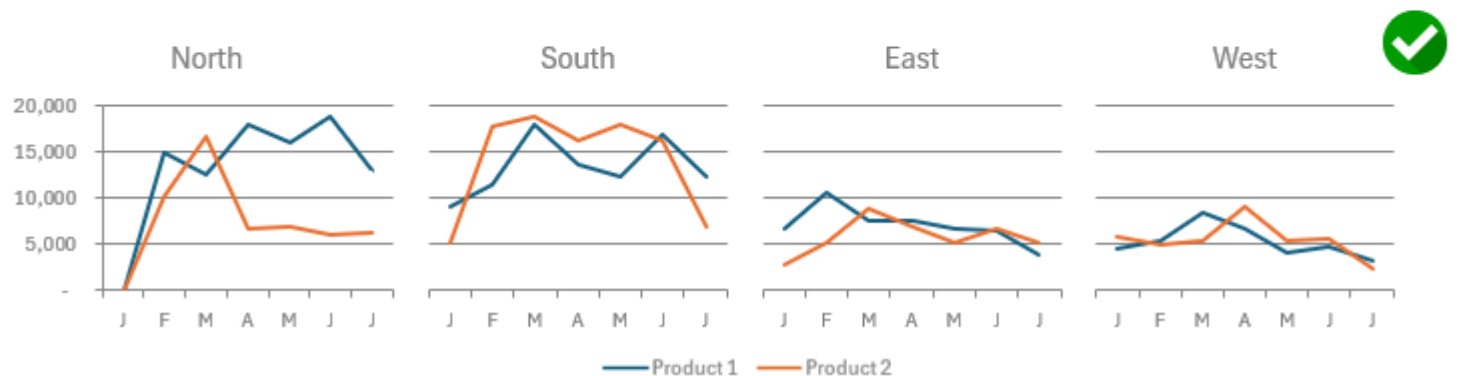
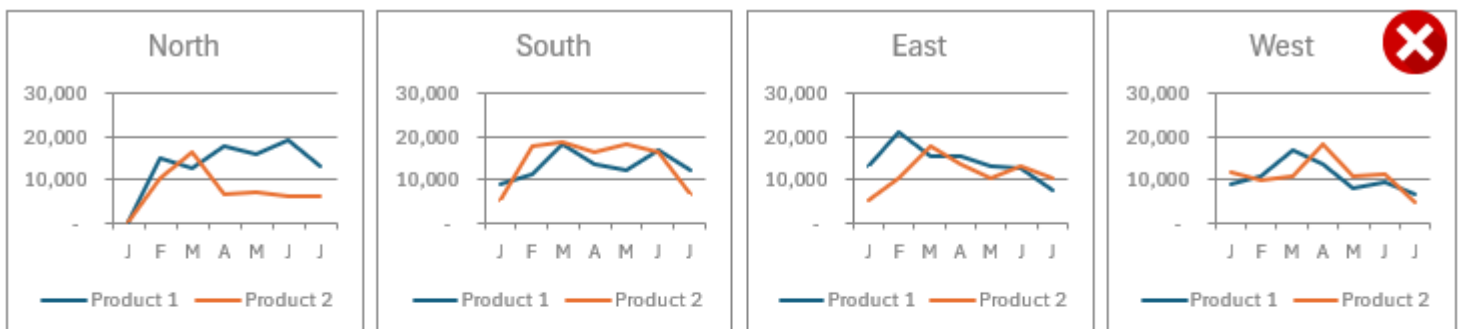


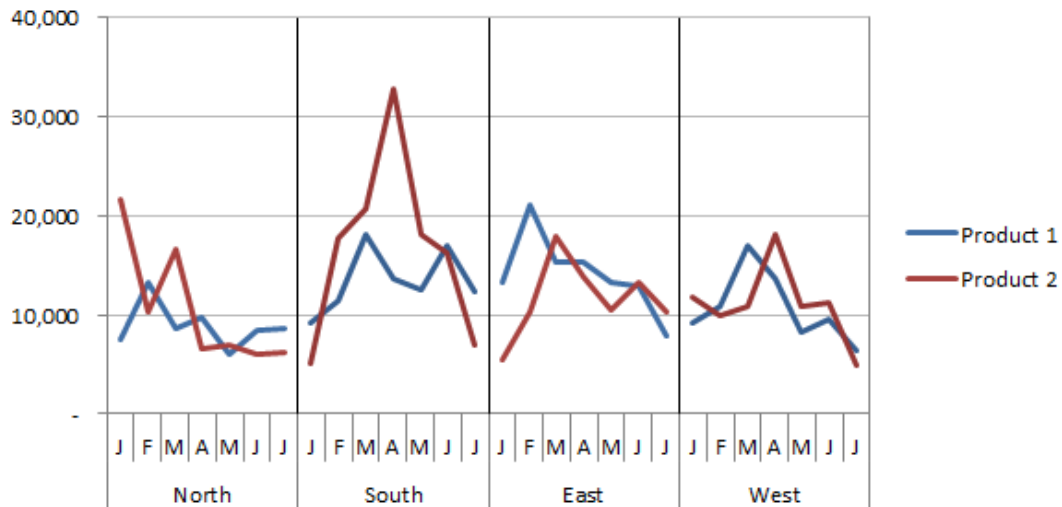
Figure 2 Minimal formatting delivers the message without the noise

2. If you're trying to convey multiple messages in one chart, consider more charts.
3. If you've got multiple charts with the same labels, align the charts and label them once, once, once, once....



Note: make sure the vertical axis is the same for every chart.

Alternatively, a panel chart can work quite well:



4. Just because you have data on it doesn't mean you have to put it in your report. Make sure it's relevant to the overall objective and aids in interpretation.

"Everything should be made as simple as possible, but not simpler."

Albert Einstein



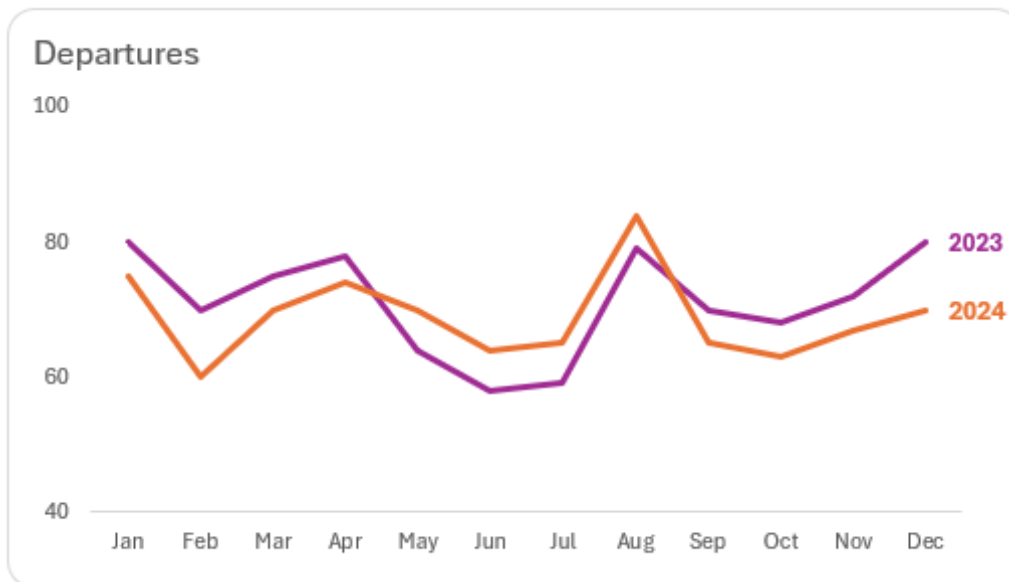
Know Your Audience

5. If your audience doesn't know a frequency polygon from a spherical polygon find a simpler alternative until you have educated them.
6. Know your message and match it to the right type of display, be it chart, table, or symbols.
Tip: a chart isn't always the best method of communication, sometimes a table is better, especially when the information needs to be precise.
7. Know the objective for your report and make sure you answer the relevant questions and lead the reader to the answers.
8. If your audience are internal employees, then you can leave your company logo off. You know who you work for.
9. If the dashboard is going to be printed make sure it fits nicely onto one page, either portrait or landscape. Don't forget to set the print settings including information in the footer about the source of the data, contact details and print date. If it'll be viewed on screen, make sure it fits without the need for scrolling.

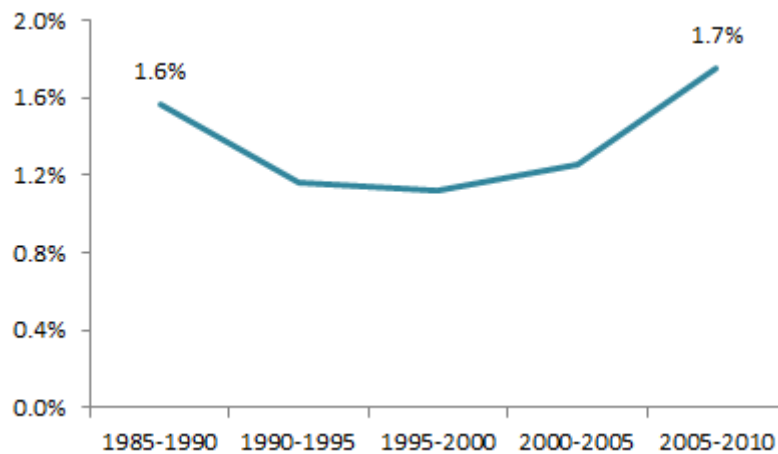


Formatting

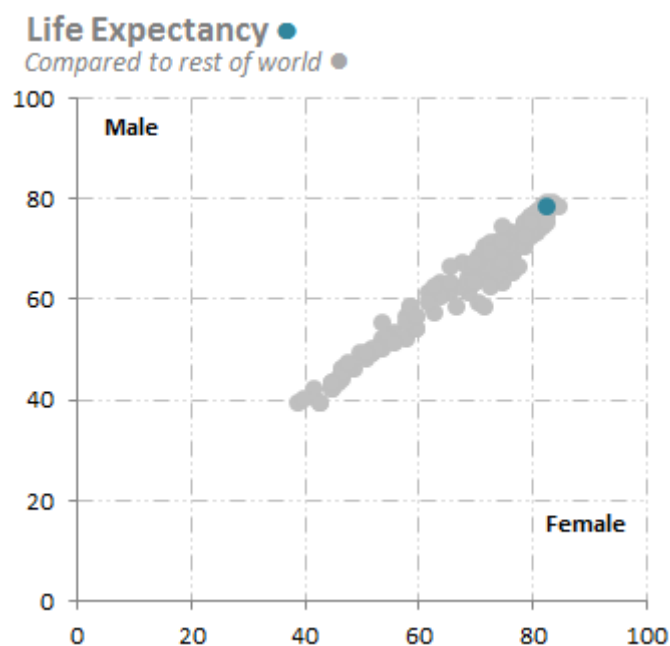
10. Put your most important data in the top left of your dashboard.
11. Link related data with common colours and conversely, don't use the same colours to highlight unrelated data.
12. If you're lacking in design genes (not designer jeans) use your company brand colours for inspiration, but if they're bright and bold, tone them down to pastel shades.
13. If in doubt use shades of grey, not 50 though!
14. Consider a label for the lines on your Line chart instead of a legend.



15. If you've got labels on your charts, you've made gridlines redundant.
16. If you use gridlines or tick marks, mute them to pale shades of grey and/or dashed/dotted lines.
17. Make sure your labels aren't obtrusive. Consider only labelling the first and or last, or highest and lowest.



18. You don't need black borders around your charts to separate them. Instead, simply leave some white space and align your charts/tables to create frames around the content.
19. Group related charts and tables together in your dashboard. Proximity, common formatting or even a subtle grey dividing line is enough to imply they are grouped.
20. You should bequeath the darkest colours to the most important information, which is usually the numbers in your tables or lines/columns/dots etc. in your charts. Use lighter shades for chart titles, axis labels and gridlines.
21. Use colour to make one piece of information stand out from the pack. For example, in interactive charts where the reader can select the region to focus on, highlight that series in a different colour to the rest.



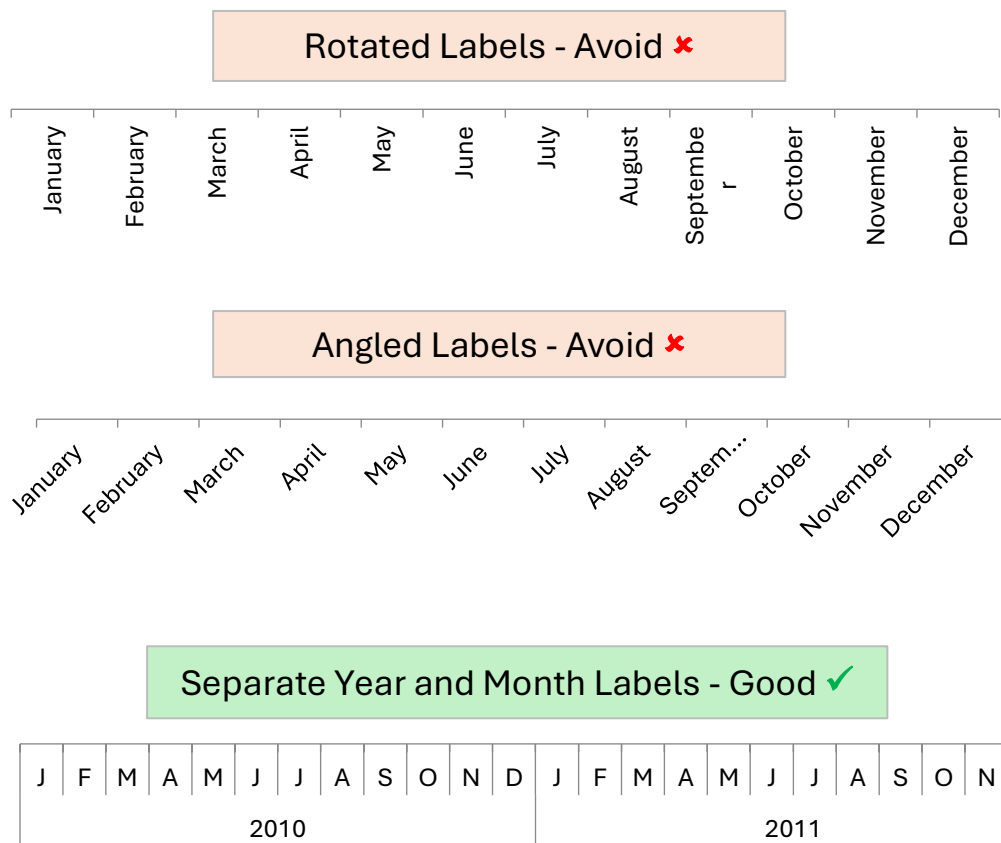
22. Dark backgrounds might look nice, but they distract from the message. White is the new black when it comes to dashboard reports.

23. Limit the number of fonts. Two is plenty. One for headings and one for the rest. Don't forget you can use font sizing to differentiate, but again don't go overboard.

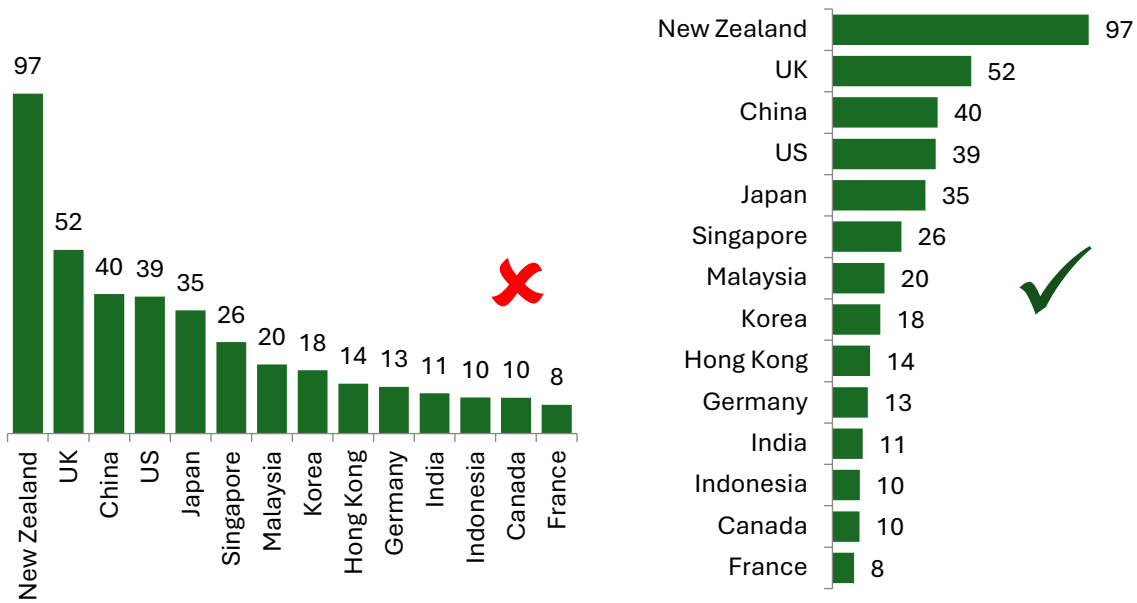
And *Comic Sans* has no place in business so you can leave that for your kids' birthday invitations not your dashboard reports.

Good fonts to use are Calibri, Tahoma, Verdana, Helvetica and good old Arial.

24. Don't make people turn their head to read the axis labels. For example, abbreviate months to J, F, M, A, M etc.

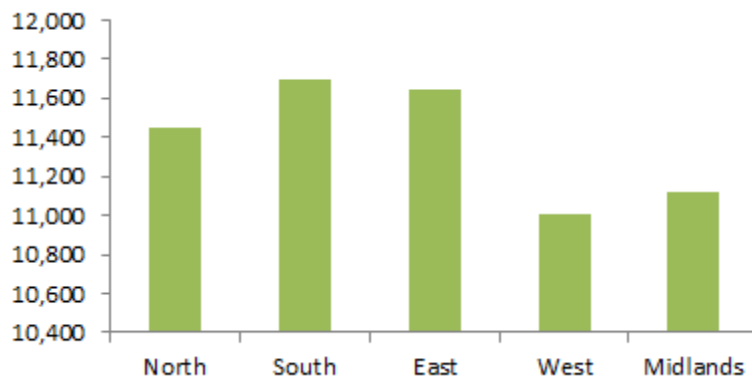


Or for nominal categories like department names, regions etc. change it to a bar chart so they can be easily read.



25. Bar and column chart axes should always include zero. Starting your axis above zero is like 'beer goggles' for your reader. It might make your chart look more attractive and dramatic but when the reader realises your deception, you're in trouble.

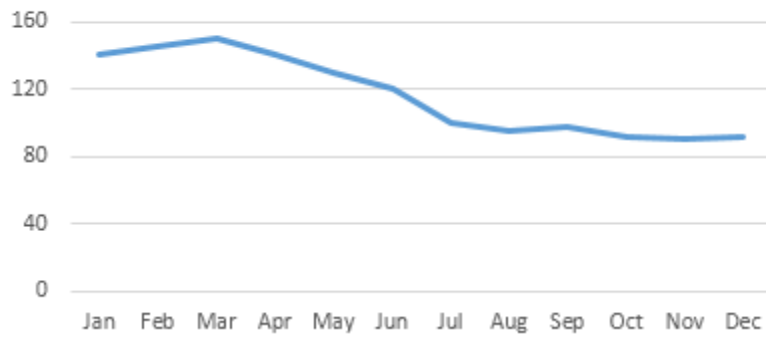
Just take the chart below; East appears to be double that of West, but if you check the scale, it's only about 5% more.



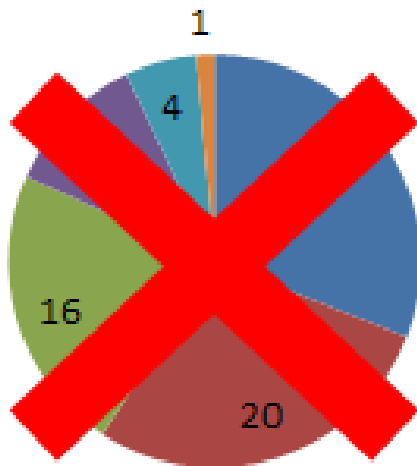
BEER GOGGLES
Image credit: Demotivated Posters

26. Chart titles don't have to be boring. Use them to make a statement about the results in the chart.

H2 sales down 31% on H1



27. Pie charts are one of the most common to get wrong. They often contain too many segments for them to be of use. If in doubt, use a bar or column chart and keep pies for eating.

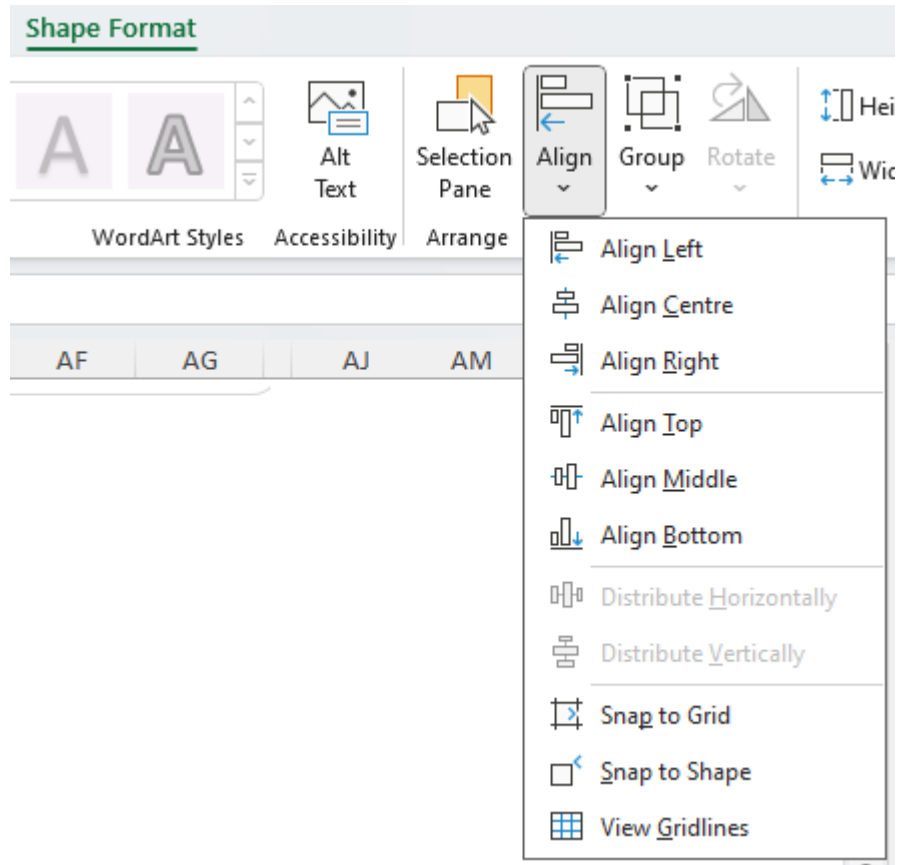




Excel Formatting Shortcuts

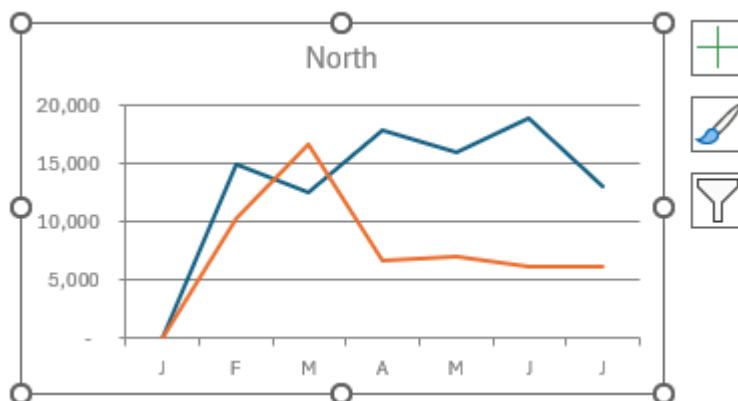
28. To select all charts (and objects) select one then press CTRL+A to select all.

29. Use the Align tools to align the charts to one another. Select the chart or charts to reveal the Format tab on the ribbon:



To select multiple charts, click on one then hold down the SHIFT key to select more.

30. To move charts using your arrow keys simply left click the chart the outer edge of the chart. You'll get small circles on the border that indicate the chart object is selected, and you can now move it by pressing your arrow keys.





Reporting Mastery

Mynda's Excel Dashboard Course

Excel Dashboard reports are becoming a standard for reporting, and as a result it's a must have skill for any Excel user who prepares reports.

Dashboards are an incredibly valuable tool in today's market for consultants, analysts and managers. But Excel doesn't make it straightforward to build highly professional and interactive dashboards.

One of my students sent me this message:

"I have to tell you that I just downloaded the Session 4 workbooks. They are fantastic. I thought I would have to take notes in order to recall your instruction. Not at all - it is all in the spreadsheet. Your online tutorials and download material are extraordinary. I am so impressed.

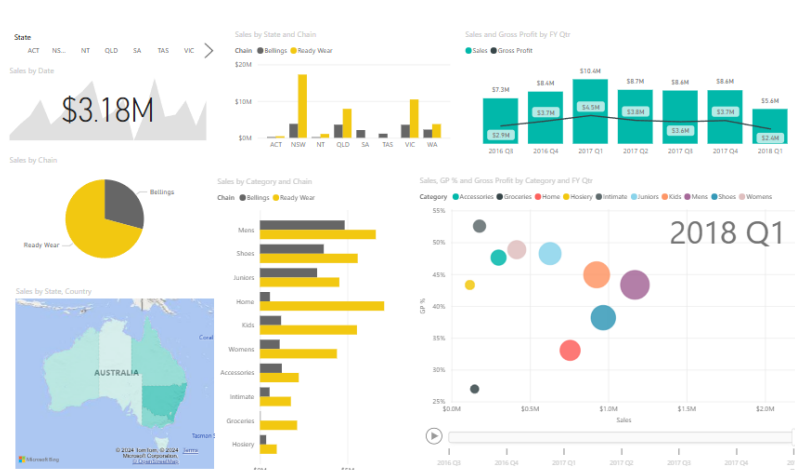
I will be recommending your online training to my colleagues. Your workbooks are easy on the eye and very easy to understand.

I am terrified by the thought of writing formulas. You explain them and make it look so easy." Kerry

If you're ready to take your reporting skills to the next level and build interactive dashboards that update with one click, check out the course and see what other members are saying. [Click here to find out more about the Excel Dashboard Course.](#)

Mynda's Power BI Course

If you're ready for the next generation of reporting, then you must check out [Mynda's Power BI course](#). Power BI is a purpose built data visualization tool that enables you to quickly develop stunning interactive dashboards that bring your data to life and enable you to monitor your business on every device and securely share your reports with stakeholders.





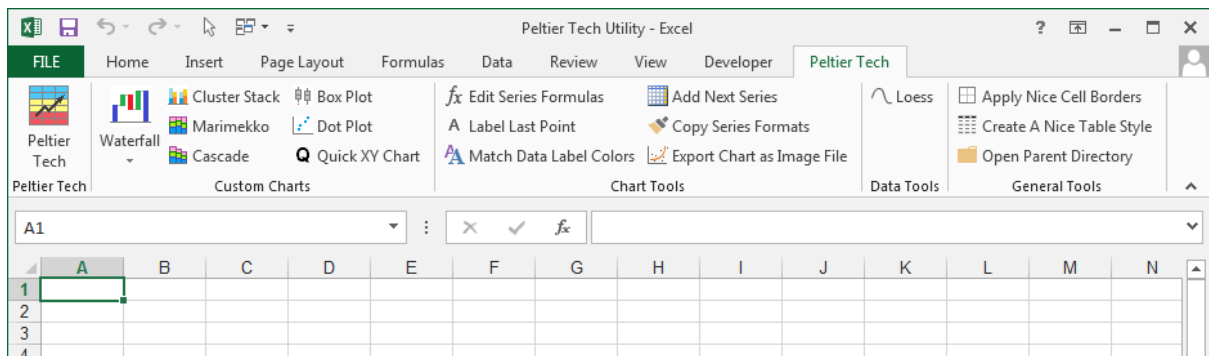
Resources

Jon Peltier's Chart Utilities

Jon Peltier is an Excel Chart Wizard and fellow Microsoft MVP.

His [Excel Chart Utility](#) provides plug-n-play solutions for 8 chart types you won't find in the Excel Chart menu's including Waterfall, Marimekko and Box Plot to name a few, plus it includes some common chart formatting shortcuts that'll have your charts looking good in no time.

It comes as an Excel add-in and has its own tab on the Ribbon read for use at the click of your mouse.



[Click here to find out more about Jon's Chart Utility.](#)

Edward Tufte

Edward Tufte is a pioneer in the field of data visualisation. For years he has been showing us how to visualise data with simplicity, clarity and elegance, while campaigning against “chart junk” and other design practices that lead to obfuscation.

We also have Edward Tufte to thank for the Sparkline which is now a standard charting tool in Excel.

He has written many books including *The Visual Display of Quantitative Information*, *Beautiful Evidence* and more.

You can find out more about Edward Tufte: www.edwardtufte.com

Stephen Few

Stephen has 25 years of experience as an innovator, consultant, and educator in the fields of business intelligence and information design. He is a leading expert in data visualization for data sense-making and communication.

In 2004 he wrote the first comprehensive and practical guide to business graphics entitled *Show Me the Numbers*, in 2006 he wrote the first and only guide to the visual design of dashboards, entitled *Information Dashboard Design*, and in 2009 he wrote the first introduction for non-statisticians to visual data analysis, entitled *Now You See It*.

His clients include Government departments, Universities, Health Care and Fortune 100 companies.

You can see more of his work and find out about his upcoming training workshops at his website: www.perceptualedge.com

Disclosure

If you purchase Jon Peltier's Chart Utilities I receive a small commission. I don't promote any old product though; as you can see his is the only product I'm promoting (other than my own course☺). It has to be good and it has to be of value to you.