30 Chants for Better Charts

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About the Author

Mynda Treacy was first exposed to the power of a spreadsheet with Lotus 1-2-3 and has been using Excel since 1995.

In 1999 she 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 she co-founded www.MyOnlineTrainingHub.com to pursue a passion for Excel and the desire to help other's get more out of it.

She has since helped thousands of people overcome their Excel challenges, and all from her desk on Queensland's Sunshine Coast, Australia.

At her website she writes a weekly Excel newsletter and runs an online Excel Dashboard course, which to date has taught over 600 students how to wrangle Excel to produce informative and interactive dashboard reports.

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 go all Gangnam Style with your charts and use everything in the Excel chart toolbox (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.
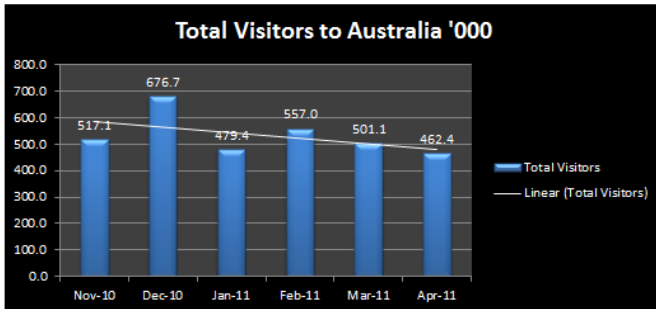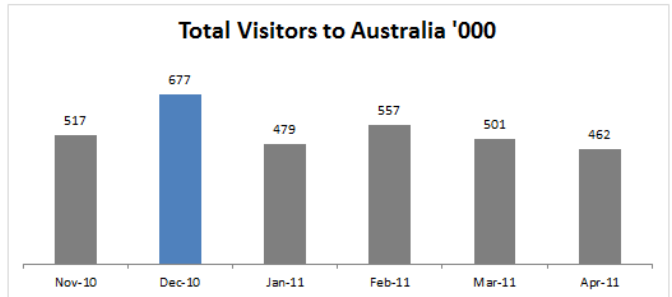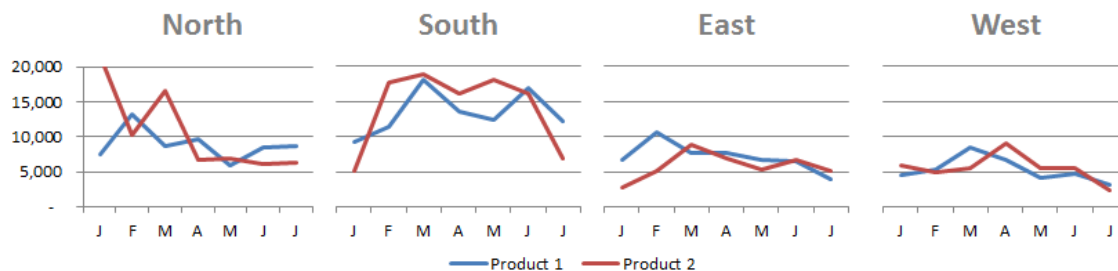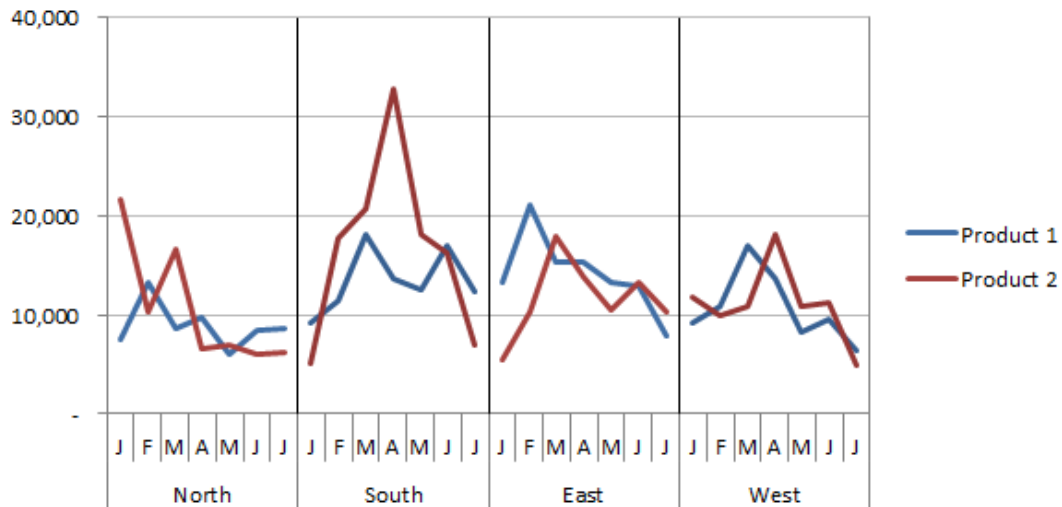

Figure 1 Gangnam Style Chart

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….

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 they don'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 your objective for the dashboard 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. Ann Emery has some great tips on the use of colour in her 'Simple Strategies for Improving Any Chart's Colors' post.

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.
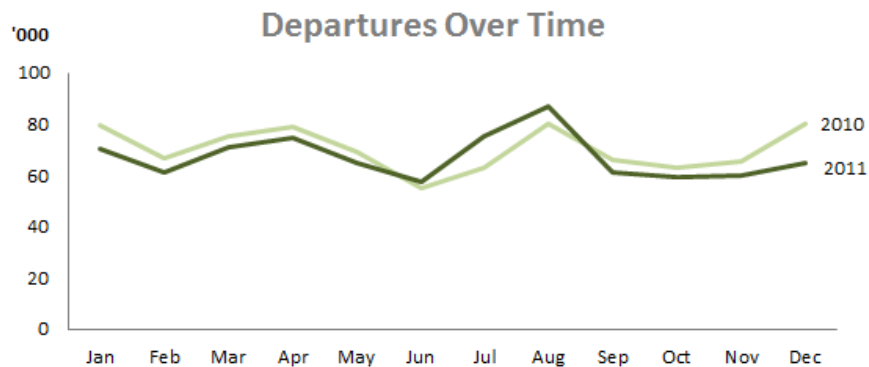
15. If you've got labels on your charts you've made gridlines redundant. Just like gate crashers to a party, they aren't wanted so get rid of them.

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.
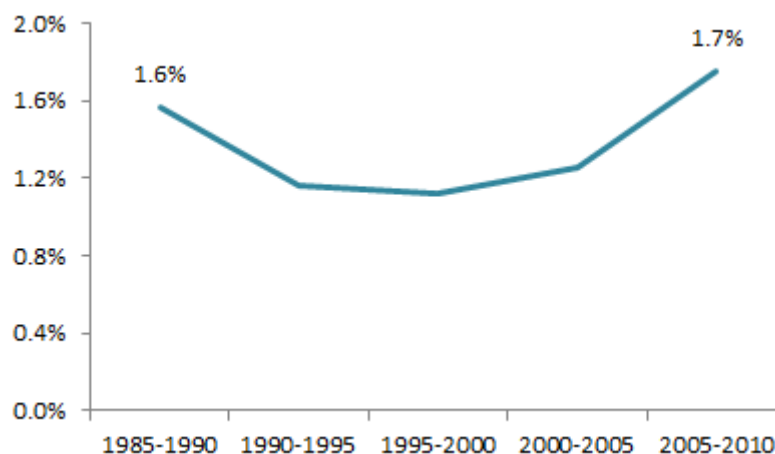
18. You don't need black borders around your charts to separate them. Instead simply leave some white space and align your charts/tables to create frames around the content.

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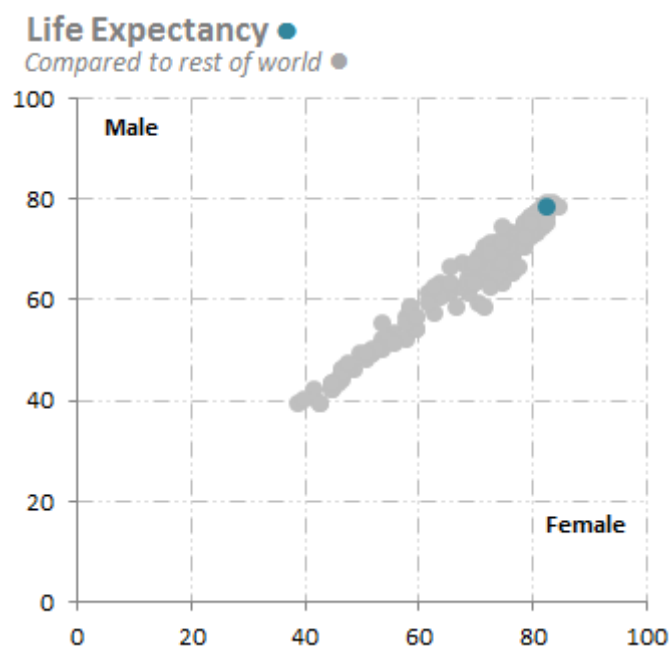
22. Dark backgrounds might look nice but they distract from the message. White is the new black when it comes to dashboard reports.

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 by the way, 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 ol' Arial.

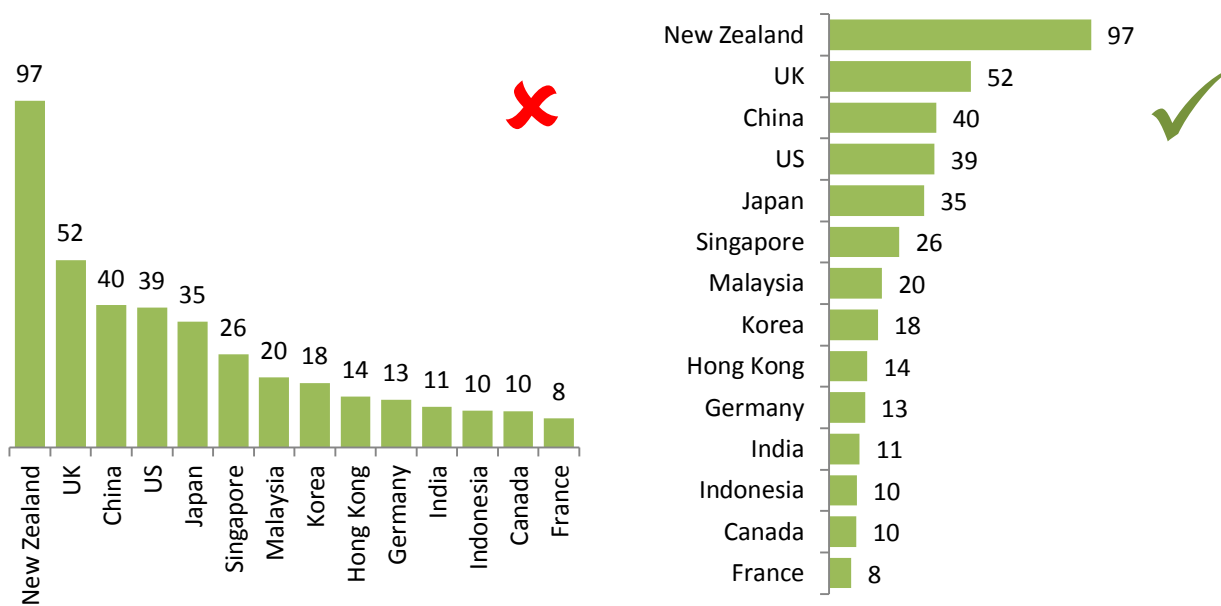24. Don't make people turn their head to read the axis labels. For example abbreviate months to J, F, M, A, M etc.

Rotated Labels - Avoid ✖

January February March April May June July August September October November December

Angled Labels - Avoid ✖

January February March April May June July August September October November December

Separate Year and Month Labels - Good ✓

J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N

2010   2011
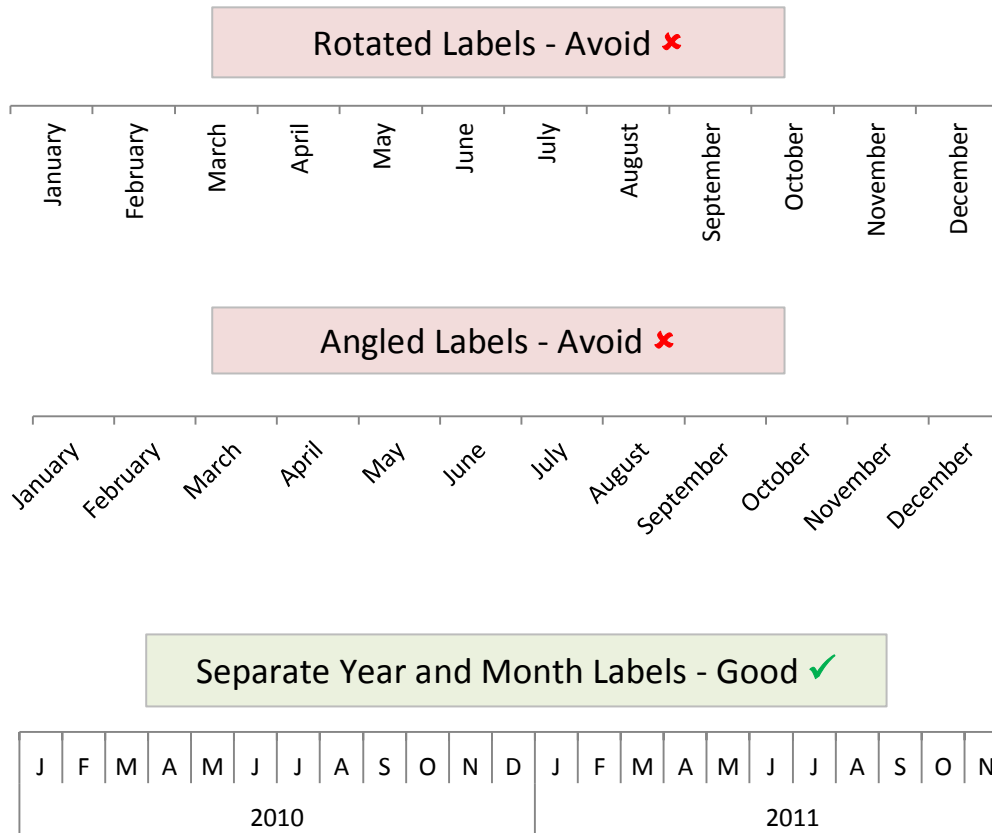
Or for nominal categories like department names, regions etc. change it to a bar chart so they can be easily read.

✖

97 52 40 39 35 26 20 18 14 13 11 10 10 8

New Zealand UK China US Japan Singapore Malaysia Korea Hong Kong Germany India Indonesia Canada France

✔

|	
New Zealand	97
UK	52
China	40
US	39
Japan	35
Singapore	26
Malaysia	20
Korea	18
Hong Kong	14
Germany	13
India	11
Indonesia	10
Canada	10
France	8

25. Bar and column chart axis 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.
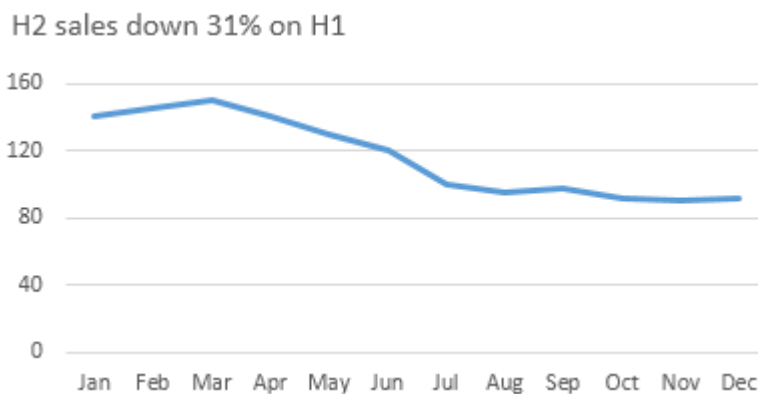

Image credit: Demotivated Posters

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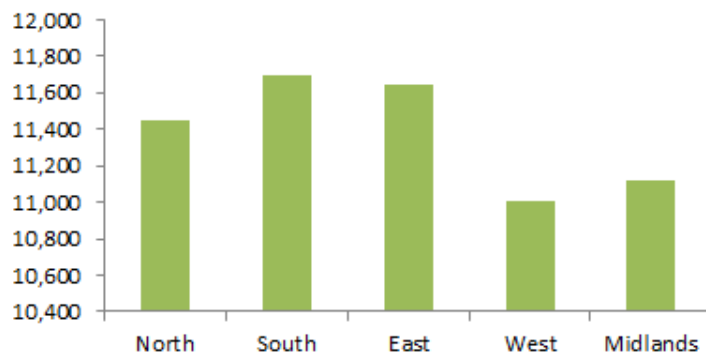
26. Chart titles don't have to be boring. Use them to make a statement about the results in the chart.


27. Pies are for eating. They have very limited place in your reports. Just take a look at my Dashboard Extreme Makeover that clearly demonstrates their downsides.
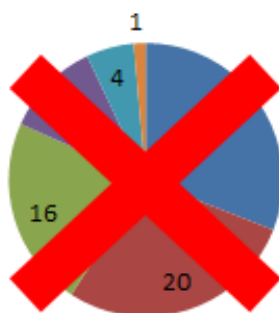
Excel Formatting Shortcuts

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 Drawing Tools Format tab on the ribbon:
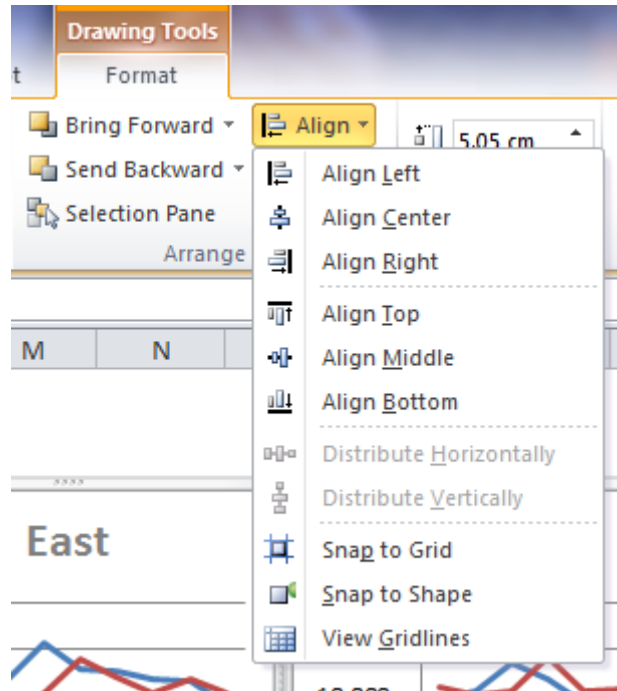
    To select multiple charts click on one then hold down the SHIFT key to select more.

30. To move charts using your arrow keys simply hold down CTRL and left-click the outside of the chart. You'll get 4 small circles that indicate the chart object is selected and you can now move it by pressing your arrow keys.
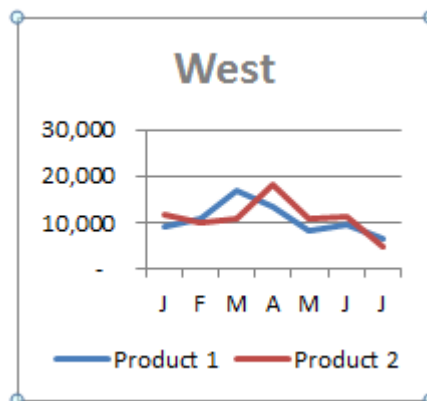
    Thanks to Jon Acampora of ExcelCampus.com for teaching me that tip.

Products

Mynda's Excel Dashboard Course

There's a new craze around town and it's called Excel Dashboard reports. Actually it's not that new but it's 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, Kerry, 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."

If you're not already a member then do yourself a favour and take a few moments to check out the course and see what other members are saying about the course.
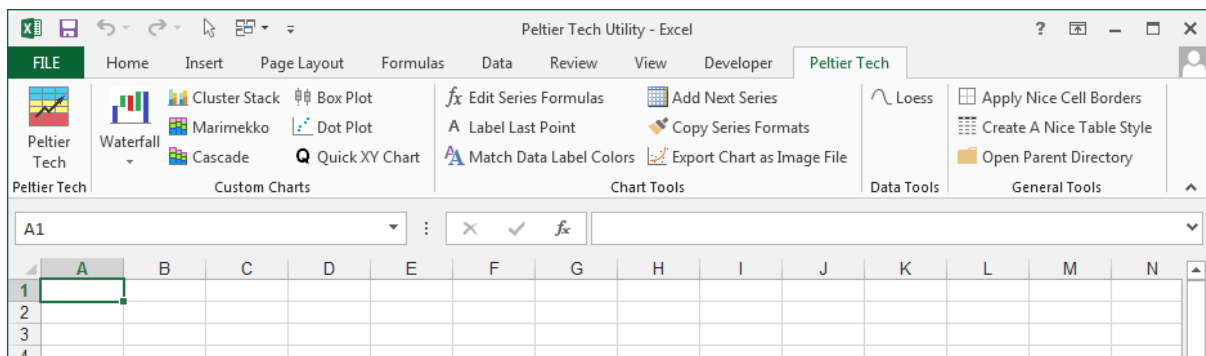
[Click here to find out more](.).

Jon Peltier's Chart Utilities

Jon Peltier is an Excel Chart Wizard and was the technical editor for John Walkenbach's Excel Charts books.

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.](.)

Resources

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

The Frankens Team

The Frankens Team (Roberto Mensa, Krisztina Szabó and Gábor Madács) are the creators of an amazing array of Excel charts. Some useful, some fun but all push the limits of what Excel can do.

See their work and download example files here:

https://sites.google.com/site/e90e50charts/

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.