

Paula Guilfoyle CPA has been an online Excel and Power BI instructor with TheExcelClub.com since 2010. During this time over 18,000 learners across 166 countries have taken her courses. BY Paula Guilfoyle

# Excel's BI Tools: An Introduction to Power View

In the previous two editions of Accountancy Plus you were introduced to the use of Excel for Business Intelligence. We saw how you can use Power Query to get and transform data and how you can use Power Pivot to transform and Model that data. But once we have the data ready for reporting, what is the best way to show it?

# Data Visualisation and Power View

The way the human brain processes information, using charts or graphs to visualize large amounts of complex data, is easier than poring over spreadsheets or reports. Data visualization is a quick, easy way to convey concepts in a universal manner – and you can experiment with different scenarios by making slight adjustments.

Power View is part of Excel BI tools, along with Power query, to get and transform data and power pivot to model the data. Power View is available in Excel 2016, 2013 and SharePoint Server 2010.

In Power View, you can quickly create a variety of visualizations, from tables and matrices to bubble charts and sets of small multiple charts. For every visualization you want to create, you start with a table, which you can then easily convert to other visualizations, to determine which one best illustrates your data.

If you are using Excel 2013 you will need to activate Power View. To do this, go to File > Options > Add ins. Then select Coms Add ins and select Power View. You will then find a new icon in the Insert Ribbon for Power View.

# Working with Power View

When you open a new Power View canvas, you will find on the right a list of tables and columns that you have in your data model. This data can be straight from Power Query or modelled data from Power Pivot.

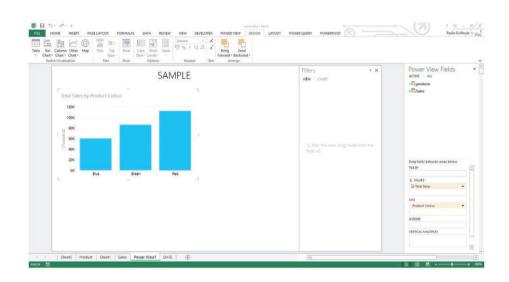
Looking at the image below we have selected Products Colour from the products table as the first field and we have selected a measure of Total sales as our second field.

The table format shown here works the very same as a pivot table created with Power Pivot. Once a table has been created in Power View, a new Design ribbon becomes available. It is from this design ribbon that you can select your chart type.

opy - 8 ormat Painter oard 16		$\left  \begin{array}{c} A \end{array} \right ^{2} \equiv \equiv \left  \begin{array}{c} \phi \\ \phi \end{array} \right ^{2} \equiv \left  \begin{array}{c} \phi \\ \phi \end{array} \right ^{2} \equiv \left  \begin{array}{c} \phi \\ \phi \end{array} \right ^{2} = \left  \begin{array}{c} \phi \\ \phi \\ \right ^{2} = \left  \begin{array}{c} \phi \\ \phi \\ \right ^{2} = \left  \begin{array}{c} \phi \\ \phi \end{array} \right ^{2} = \left  \begin{array}{c} \phi \\ \phi \\ \right ^{2} = \left  \begin{array}{c} \phi \\ \phi \\ \right ^{2} = \left  \right ^{2} \right ^{2} = \left  \right ^{2} \right ^{2} = \left  \right ^{2} \right ^{2} = \left  \right ^{2} \right ^{2} = \left  $		General - 52 - 56 + 51 /2 Number	Conditional Formation Formatting - Table -	Normal Good Styles	Bad Alexand	Incart, Dalate Format	∑ AutoSum * Arv ∰ E Fill * Solt & Find & Clear * Filler * Select * Editing
Fiproduct Colou	r Total Sales	SA	MPLE				iters ew i maile	< x	Power View Fields ACTIVE ALL DEsproducts DEstates
Blue Green Red	\$60,132,45 \$85,877,70 \$112,419,75								
Total	\$258,429.90								
							To filter the view, drag fie held lot	Hats from the	
									Drag fields between areas below: Tist By
£			4						PRELDS Product Colour Total Sales
94 m			ц						FitLDS Product Colour



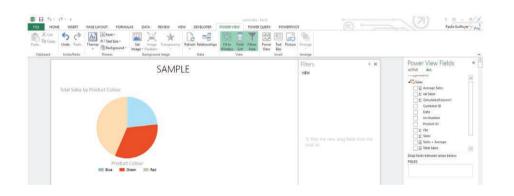
There are many charts to select from. There are Bar and Column charts, Pie Charts, Line Charts, Scatter Plots, Bubble visualisations and Maps. There are also other visualisation such as Tiles and Cards.



# **Common Chart Types**

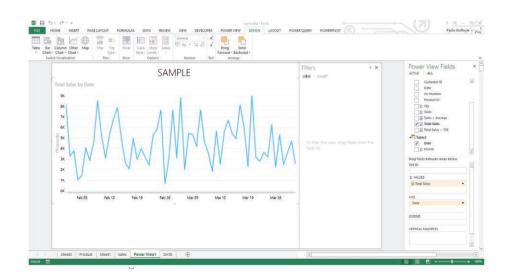
## **Column Chart**

Column charts are typically used to compare several items in a specific range of values. Column charts are ideal if you need to compare a single category of data between individual sub-items, for example, when comparing revenue between regions. A clustered column chart can be used if you need to compare multiple categories of data within individual sub-items as well as between sub-items. For instance, you can use a clustered column chart to compare revenue for each year within each region, as well as between regions.



# Pie Chart

Pie charts are shaped like a pie and are best used when you need to show the amount of a much larger category that's taken up by smaller sub-categories. Pie charts are best used for one data set that's broken down into categories. If you want to compare multiple data sets, it's best to stick with bar or column charts.



#### Line Graphs

Line graphs are particularly useful for identifying patterns and trends in the data such as seasonal effects, large changes and turning points. In this article we will look at how power view, with the aid of line charts can help identify opportunities and make some business decisions based on the visualisations

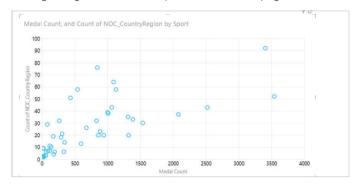
Continued on Page 40

ACCOUNTANCY PLUS. ISSUE 03. SEPTEMBER 2017

#### Continued on Page 39

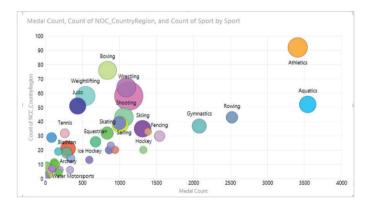
### Scatter Plots

Scatter Plots are used to show the correlation or the relationship between two sets of variable. In essence it is used to show how much one variable affects another. Scatter plots work best when you are looking at large number of data points without worrying about time.



## Bubble Chart

A bubble chart can be used instead of a Scatter Plot when you have three sets of data. One of which can be time. In fact with Power View you can create a Moving Bubble Chart played against time periods.



#### **Power View Maps**

In Power View you can visualise your data by geographical locations. Power View uses Bing Maps



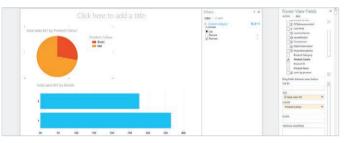
#### BY Paula Guilfoyle

#### Interactivity and Filters

When you create multiple charts on a Power View you have the ability to cross filter. This is very simple to achieve. Just click on one of the visualisations and the others will automatically filter as long as relationships are set up and DAX measures don't clash.

Bits Mail <th< th=""><th>NOWIN COTISA. NOWINAMAGI (1)</th><th>Paula Guiteyer - yul Power View Fields *</th></th<>	NOWIN COTISA. NOWINAMAGI (1)	Paula Guiteyer - yul Power View Fields *
Click here to add a title	Fiber: • • •	Power View Fields *
total arise M1 by Mooth		ATS
K IX K Market IX IX		Mandr

You will also notice a Filter section on the right of the canvas. This can be used to further filter the visualisations.

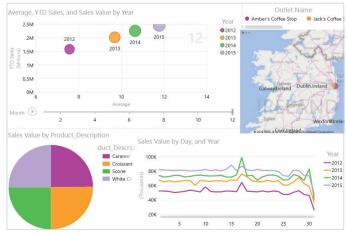


## Conclusion

Excel's Power View is an awesome addition to the power tools we have looked at in previous articles. It allows you quickly visualise your data, which is easier to understand than searching through tables of data.

With Power Query, Power Pivot and Power View Excel has become a self-service business intelligence tool. A tool that all Excel users can use to gain insights into data like never before.

Would you believe that this is not the end of the story? I love Excel, I will always love Excel. But Microsoft have pulled another rabbit out of the hat when it comes to self-service business Intelligence.



Stay tuned for the next article in the December edition of Accountancy Plus.