CPA Australia Podcast

Episode 68 - Transcript

Intro: Hello and welcome to the CPA Australia Podcast, your weekly source for business, leadership and public practice accounting information.

Jillian: Hello and welcome to the CPA Australia Podcast. My name's Jillian Bowen, and I head up the content and social media team at CPA Australia. This week I'm pleased to welcome back Microsoft Excel expert and CPA, Neale Blackwood. With more than 20 years of experience using and teaching others about Excel, Neale is widely acknowledged as the go-to expert for accountants and other professions. This week Neale is sharing some of the important features that have been added to Excel over the years. Now these can really save you time and improve your processes. We hope you enjoy this episode and over to you, Neale.

Neale: Hi, my name's Neale Blackwood. I write the Excel Yourself articles for the *INTHEBLACK* magazine. With every new version of Excel, Microsoft adds more and more features and functions. So depending on your version, you could be sitting on some hidden gems. By the way there is a new version of Excel due out later this year. Now, when Excel 2007 was being developed, Microsoft did a survey of Excel 2003 users. So they wanted to find out what they wanted. They got the responses back and they found out 80% of what people wanted was already in Excel, but people didn't know what it was called or where it was. That was what drove the development of the Ribbon interface which first appeared in Excel 2007. So today, we're going to be looking at what you might have missed in Excel over the past 10 or 11 years. We'll go through version by version.

Neale: Excel 2007, that's where, as I mentioned, we were first confronted with the Ribbon. The Ribbon was a change from the menu system that was already there and toolbars, but unfortunately when they put the Ribbon in they didn't really explain there was what's called a Quick Access Toolbar that's also there. You can customise that toolbar. So on any icon on the Ribbon you can right-click it and add it to what's called the Quick Access Toolbar. Now that exists when you install Excel above the Ribbon. But if you right-click it you'll see there's an option to show it below the Ribbon, which is sort of what I do. And once you add all of the icons that you use frequently, you can then hide the Ribbon, so Control F1 is the quick way to do that. That's a toggle command, so if you press it again, it'll show the Ribbon.

Neale: Also in Excel 2007, they brought in a new file type. So it was an XML file type and there were a couple of them. There was the XLSX and the XLSM, and the M was the macro-enabled version. There was also another file type that was brought in, and that's XLSB, now that stands for binary. Now I have written an article about that. And the binary file type wasn't really taken up when it first came out, 'cause there was some compatibility issues with other systems, but over the years that's sort of gone away now as an issue. And the binary file type is actually very efficient if you do have large files. So, for

example, if you had a 10 MB Excel file, if you save it as binary, then you'll probably drop to six or seven MB. Binary file types can also handle macros as well.

Neale: In Excel 2007 that's where our number of rows leapt up to over a million and the columns are now over 16,000. Probably one of the most important features that was added in Excel 2007 was the formatted table feature. Now, formatted tables are a lot more than just about formatting. In fact, the formatting probably is the least important part of it. Formatting tables basically allow you to define a table, and that table will be treated like a little database, basically, by Excel. And so as you add columns to it or add rows to it, the table will automatically expand. It's also got ... Okay, they're called structured references, I tend to call them table names, but they are sort of like range names. And the beauty of them is they automatically expand. When you use a formatted table as a data source for a pivot table, it has the advantage of when you refresh the pivot table, then any extra rows or columns that have been added to the formatted table will automatically be included.

Neale: A couple of functions that were added that are quite useful is the SUMIFS function and the COUNTIFS function. Now, the S on the end basically means you can do multiple criteria. There was a SUMIF function, SUMIFS allows you to do multiple criterias when you're summing. The COUNTIFS, you can do multiple criterias for counting. Another useful function that was added in Excel 2007 is the IFERROR function, which basically simplifies the handling of Excel's errors. So check those three functions out if you haven't already used them.

Neale: Okay, let's jump ahead three years, so we're in Excel 2010. What's been added to that is something called a slicer. So slicers are in the pivot table Ribbon and they allow you to filter pivot tables. Now, there already was a filter built into pivot tables, but there was a couple of things that you couldn't do with the filters in pivot tables. One of them was they were a bit clunky to use for the users. Slicers are a graphical interface, so they're a lot easier to use, and also if you add a filter with a slicer, you can still report on that field. One of the limitations with filtering a field in a pivot table is you can't report on that field, but with a slicer you can.

Neale: A chart, there's no new charts in Excel 2010, but there was a new chart type, and that was the sparkline charts. Now sparklines were named by the visualisation author, Edward Tufte, and they are small charts that fit basically in a cell. And the two common ones are a column and a line chart. So sparklines are in the Insert menu, so you can check them out. They're reasonably easy to use.

Neale: A new function that was added in Excel 2010 was the Aggregate function. Now this is sort of a cousin of Subtotal and it allows you to do multiple calculations, but the advantage with Aggregate, it has the option of ignoring errors. So no other calculation function can ignore errors, but Aggregate can. Its only limitation is that it only works on columns, you can't use it sort of sideways across a row.

Neale: Now, probably the most important addition to Excel in recent years happened in 2010 when the Power Query add-in was made available. It's a free add-in, so it's free for 2010 and 2013, it's actually built into 2016. It had a name change which I will get to when we

get there. Now, Power Query allows you to import data, whilst at the same time performing data cleansing operations. So I've written a number of articles over the last two or three years on Power Query, highly recommend that you look it up if you haven't already started using it. It's extremely powerful. It can do things in minutes that used to take hours to create with macros and formulas and other things like that. So Power Query really has made it a lot easier to import data from virtually any source.

Neale: Power Pivot was also an add-in to 2010. Power Pivot is sort of like a pivot table on steroids, and it allows you to basically treat Excel like a relational database. So you can report on multiple tables in the one report. So that's Power Pivot. Also, in 2010, we got introduced to the idea of a 32-bit versus a 64-bit Excel. Now, that's to do with memory and basically how much memory RAM that you can use. A 32-bit is limited to 2 GB of RAM. The 64-bit version basically doesn't have a limit, it's limited by how much RAM you actually have. If you are using large datasets, so I'm talking millions of rows, then the 64-bit version was the way to go. Now, obviously you can't have millions of rows within Excel, but Power Query and Power Pivot both can handle external data sources that have millions of rows. There were other issues associated with the 32-bit versus 64-bit and that related to compatibility. Hopefully, that's less of an issue now, but certainly when it came out, some people couldn't upgrade to the 64-bit due to legacy system compatibility issues.

Neale: Okay, another three years, Excel 2013 we're up to. Now this introduced the idea of a subscription version. So office, you can subscribe, pay per month, and basically get the latest updates. That's actually what I use, I use the subscription version and the pro version, whichever is the most expensive so sort of get everything. That was one of the problems in some of the subscriptions versions, you couldn't get Power Pivot, for example. Again, that was back in 2013. But something they did add to Excel 2013 was the Data Model which basically allowed you to create relationships and relate tables together. So you could report on multiple tables with a pivot table, so the relationships is in ... that is an icon in the Data Ribbon, so check that out. And I said the Data Model is all part of that.

Neale: And then, we've got the Timeline Slicer, the slicers were really good, and I said, the graphic interfaces for filtering, but they didn't really work too well with dates. And so that's what the Timeline Slicer allows you to do. It works really well with months and years and quarters and things like that. So Timeline Slicers can work on Pivot Tables. I remember back in the day when I was doing a training session on Excel 2013 and I showed one of my clients the Timeline Slicer, they decided to upgrade to Excel 2013 just for that ability. Also in Excel 2013, they tweaked the normal slicer so that it was available to work on a formatted table. So that was that formatted table that I mentioned back in 2007. You can actually use a normal slicer to filter those type of formatted tables.

Neale: A good function that was added into Excel 2013 was the IFNA. So the good old NA error in Excel, typically for VLOOKUPs and MATCHs that you'll see it, it was always difficult to actually handle the NA error a little bit differently than other errors. But now with the IFNA and the IFERROR functions, you can create shorter formulas, that they're still reasonably long, but they're not as long as they used to be. So the IFNA function will

handle the NA error, and then you can use the IFERROR to handle all of the other types of errors that Excel can throw at you.

Neale: Okay, one of the other areas that people sort of spotted when Excel 2013 came out, was that it was a little bit squarer. Okay? So there was straighter lines, so on the Ribbon and also even on the sheet tabs at the bottom. And there was actually method in their madness. So Excel 2013 looks squarer because they were looking at adding the ability to use touchscreens. So that's why you don't quite get the angles that you used to get on a lot of the interfaces. They're trying to make it better for our fingers to be pressing on screens. And so having squarer and straight lines enables that.

Neale: Okay the current version, or as I speak, the current version, Excel 2016. Power query, which now has been re badged as Get & Transform, is now part of Excel 2016. It's in the Data ribbon. As I mentioned earlier, that's really powerful. And if you haven't already started using power query, I highly recommend you do. A lot of the basic data cleansing stuff is actually built into it. Things like trimming the leading and trailing spaces is just a button click. Fixing dates is basically just a button click. So, so many things that would take a lot of effort in Excel, are now just button clicks on the ribbon. And also allows you just to extract from a whole lot of different data sources, and just clicking a refresh to do it.

Neale: Okay, a couple of new charts were added in Excel 2016. We've had to wait many years to get new charts in Excel. And so two of the useful ones are a waterfall chart. Now, waterfall charts, hard to explain in a podcast, but basically they allow you to explain, visually, how you get from one figure to another figure and sort of broken down by categories. And so really common for showing how the actuals compare to budget, or last year to this year. A waterfall chart. They're also called bridge charts. I did actually do an article on them last year, I think it was. So look it up on the INTHEBLACK website, so waterfall chart.

Neale: And another chart that was added was the pareto chart. So the pareto chart is the good old 80/20 rule, where 80% of something is driven by 20% of something else. So the common example is 20% of your clients might account for 80% of your sales. Pareto analysis is really useful to sort of hone in on really important sections of your business. And so pareto charts enable you to sort of look at that, to see it visually and see what the actual impact is. So obviously the 80/20 is an estimate. It actually goes back to actually agriculture. That's where it came from, but they found out that this 80/20 rule actually applies to a whole lot of stuff. So the pareto charts now make it a lot easier to create, or to visualise that pareto principle.

Neale: A couple of new functions. Now, Excel 2016, in the subscription version, also is a little bit different to just the desktop version, if you've loaded it off a DVD, for example, because if you've got the subscription version, you can get extra stuff. And there's a couple of functions, or three functions actually, that are available in the full subscription version, that I don’t think you get in the updated 2016 version. There is a TEXTJOIN function, which allows you ... Which I covered at the end of last year's article, which allows you to actually refer to a range and join all of the text within the range. It's got a sort of a sister function called CONCAT. The CONCAT function, which is short for

concatenate ... I love that word, concatenate, which is actually an Excel function. The CONCAT function also works on a range, but it's a very basic one. So it just joins everything together with nothing between what you're joining. The TEXTJOIN allows you to specify a spacer, or a delimiter that goes between each of the entries in the range.

Neale: And lastly, there's another function called IFS. So I-F-S. And it is a simpler version of the IF statement. How do I put it? It doesn't have a false. So you basically just set up a whole lot of logical tests, and you just tell Excel what do to if it's true. And you just keep comma, comma, comma, and you just have a logical test: What do you do if it's true? A logical test: What do you do if it's true? And right at the end, you can actually specify something that is the default. But basically the IFS function just simplifies looking at multiple logical tests.

Neale: And lastly, again, if you're in the subscription version, you are able to set some defaults for your pivot tables. So that's with the latest update. It's not a lot. I was actually a little bit disappointed in some of the defaults that you can set, but some of the ones might be useful. You can check that out by clicking file, then options, and on the left hand side there's data, and there's an edit default layout button. And when you click that, you get the options that you can change. Just keep checking back on this, because this may develop over time, and you may get some more options here.

Neale: So that's the Excel "In Case You Missed It" version of the podcast. So some of the options that have been added to Excel over the last 10, 11 years. And no doubt, we've got some more coming when we get to this year's version.

Neale: I want to finish with a topic that is fairly popular at the moment. It's regarding a package called Power BI. The BI stands for business intelligence. It's Microsoft's dashboarding product. Power BI works seamlessly with Excel. And I mentioned earlier about the power query, and power pivot add-ins. Well, both of those are actually included in Power BI. So any skills you learn in power query and power pivot can be directly applied to Power BI. It's likely that Power BI will replace Excel as the go-to dashboard creation package. Power BI basically allows you to use a "drag and drop" interface to create reports and charts. It's very much like a pivot table, but you can create virtually any type of chart, now. When set up correctly, Power BI also has a much better sharing and security features than Excel.

Neale: Also, Power BI's being upgraded constantly so each month there's a new set of upgrades. You can even suggest improvements. And if the suggestion gets enough votes, there's a voter system there, that you can actually get it added to the development schedule. Power BI has a fully featured, free desktop version as well as a paid subscription version. I highly recommend that you have a look at Power BI. Now, early last year I wrote a series of three posts on the INTHEBLACK website. They all include a video, and it's sort of an introduction to Power BI. So you can sort of check that out. Now, I mentioned a few limitations back then. Most of those have been fixed already. Between Power BI and Excel, I think you're going to be able to handle all of your reporting needs going forward.

Neale: Thanks for listening, and best of luck checking out all of these new features in Excel.

Jillian: Thank you so much, Neale for those incredibly helpful Excel tips. It's really no surprise that your Excel podcast episodes are among our most popular. Now, to learn more about Neale, get a transcript of this episode, listen to other episodes, and much more, you can check out the show notes at cpaaustralia.com.au/podcast/68. Make sure you get an update when Neale's next Excel episode is available. Now, you can do that by subscribing to the CPA Australia Podcast on iTunes or Stitcher. Thanks for listening.

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