

Sum Product

NEWSLETTER #13 - December 2013

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13 may be unlucky for some but for us, this month's newsletter represents our first birthday. Whether you've been here since the beginning or you're a relative newbie, I hope you are finding them useful.

At this time of year, many of us turn our minds to thoughts of converting and SumProduct is no different – converting units, numbers and even versions of Excel.

Enjoy!

Liam Bastick, Managing Director, SumProduct



Christmas Quiz Challenge

SumProduct, in conjunction with the Chartered Institute of Management Accountants (CIMA), is pleased to announce the annual Xmas quiz. It's open to everyone, not just accountants. Check out the Excel challenge – with prizes – in the December issue of Insight at: <http://www.cimaglobal.com/Thought-leadership/Newsletters/Insight-e-magazine/Insight-2013/Insight-December-2013/Spreadsheet-skills/>

Preaching to the CONVERTed

We often encounter financial models and spreadsheets falling over due to the significant prevalence of hard code. One common reason is due to analysts converting data from one measure or unit to another (e.g. from kilograms to parsecs, or something like that!).

Some modellers will go the extra mile (pun intended) by having a reference section where conversion factors are stored and referenced, e.g.

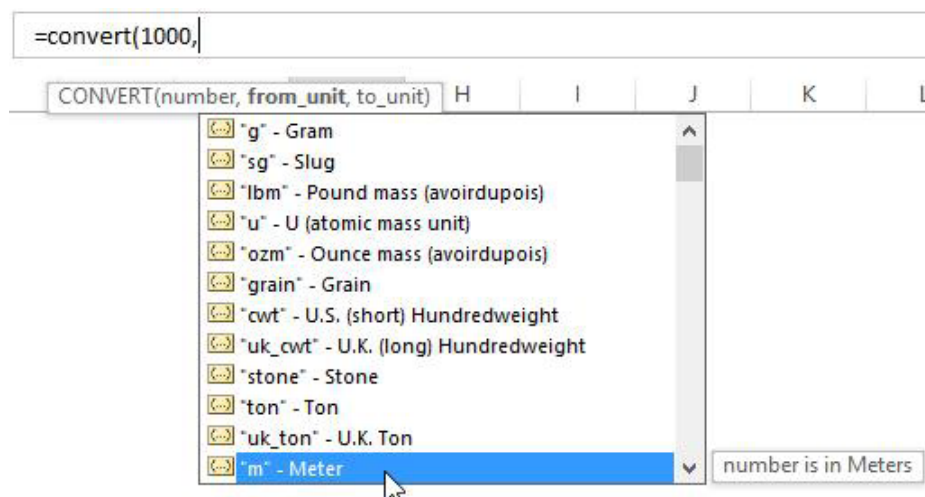
Inches in a kilometre	39,370.08
Light years in a parsec	0.3066014
Grams in a pound	453.59237
Number of tablespoons in a barrel of oil	10,752

The problem with this approach is that figures may be transposed, typed over or stated the wrong way round (e.g. a common conversion error we found was tonnes in a ton). These numbers are constant – and there is another way.

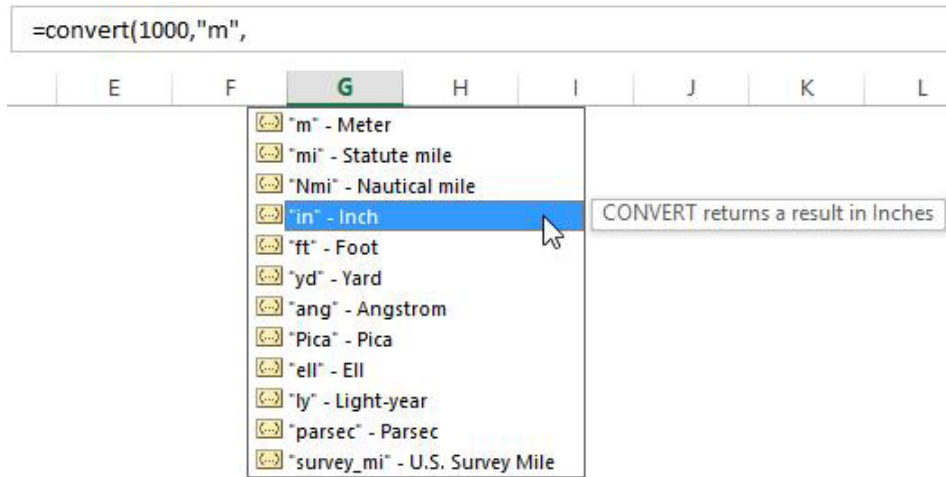
If you are not familiar with this function already, let us introduce you to the CONVERT function:

=CONVERT(number,from_unit,to_unit).

Since Excel 2007 and the advent of Formula AutoComplete, this function has really come into its own. For example, to generate / confirm the first conversion factor, simply use 1,000 for the number and locate "meters" (sic)



Then, after selecting the appropriate 'from' unit, the list for the third argument will automatically filter for meaningful conversion units (e.g. "kg" will not appear):

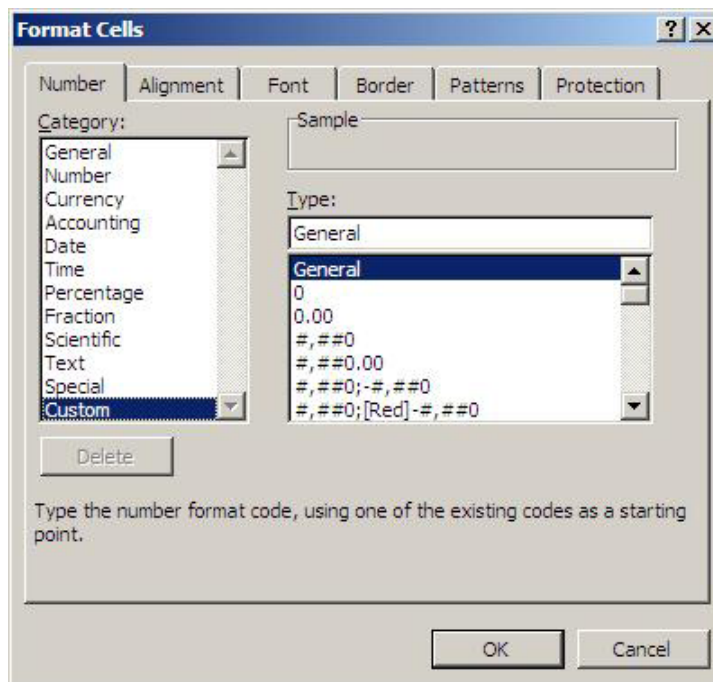


Simple!

The only criticism we have is that the units do not appear to be in any logical order (e.g. alphabetical), but, unlike U2, you can usually find what you're looking for.

Converting Numbers

One common conversion in spreadsheets involves the appearance of numbers. We've talked about number formatting on several occasions before. Cells may be individually formatted, using CTRL + 1 or ALT + O + E in all versions of Excel:



Formatting only changes the appearance, not the underlying value, of a cell. For example, if cells A1 and B1 had the number '1.4' typed in but were formatted to zero decimal places, then if cell C1 = A1 + B1, you would truly have 1 + 1 = 3 (well, 1.4 + 1.4 = 2.8 anyway).

Selecting the 'Custom' category activates the 'Type' input box and allows between 200 and 250 custom number formats in a particular workbook, depending upon the language version of Excel that has been installed.

Custom number formats allow up to two conditions to be specified. This is because only four sections are allowed for custom number formatting and two are reserved. The fourth section always specifies text formatting and one other section is required to detail how 'everything else' (numerically) will be formatted.

Consider:

[>=1000000]#,##0,,"M";>=1000]#,##0,"K";0

Whilst the full Custom Number formatting syntax can be found on our web site at <http://www.sumproduct.com/thought/number-formatting>, in summary the conditions are included in square brackets such that if the condition is true, the following formatting will be applied:

Format		
	[>=1000000]#,##0,,"M";[>=1000]#,##0,"K";0	
Number		Appearance
0.1		0
1		1
10		10
100		100
1,000		1K
10,000		10K
100,000		100K
1,000,000		1M
10,000,000		10M
100,000,000		100M
1,000,000,000		1,000M

In this example, there are only three sections, so text will be formatted 'generally'. The first section, [**>=1000000]#,##0,,"M"**, will format all numbers greater than or equal to a million to the nearest million and add an "M" to the end of the number.

The second section will only be considered if the first condition is not true, so the order of the two 'conditional formats' needs to be thought through. Here, the second section, [**>=1000]#,##0,"K"**, will format all

numbers greater than or equal to a thousand (but necessarily less than a million) to the nearest thousand and add a "K" to the end of the number.

The third and final section, **0**, will format all other numbers (every value less than 1,000) to the nearest integer without thousands separator(s).

It's a useful trick and does not modify the underlying value of the number formatted.

Converting to a newer version of Excel?

Working with our clients worldwide, we still find there's a significant number of people working with Excel / Office 2003. Microsoft is slowly starting to disengage from Office 2003. In fact if you are still using 2003 products, to ensure that you continue receiving security updates for Office, do make sure you're running Office 2003 Service Pack 3 (SP3).

However, the support for Office 2003 will terminate on **April 8, 2014**. If you're still running Office 2003 after support ends, to receive all important security updates for Office, you will need to upgrade to a later version such as Office 365 or Office 2013. For more information, please go to <http://office.microsoft.com>.

SumProduct can help you convert your spreadsheets, PivotTables, charts and financial models, if necessary, and provide advice on easing over to a newer version. If interested, drop us a line at contact@sumproduct.com.



Summit to Discuss

Late November saw Microsoft hold its second MVP ("Most Valuable Professional") Summit of the year with c.1,400 specialists descending upon Redmond, including SumProduct's very own Liam Bastick. The weather may have been close to freezing but the camaraderie was warm as Microsoft showed off its wares and held discussions with software and hardware experts from all over the globe.

The precise nature of discussions is unfortunately confidential, but Excel users can rest easy knowing that they may not have seen the last new feature to ever grace a spreadsheet or modification that will annoy the hell out of them. We did manage to sneak one picture out of the summit though which clearly demonstrates how hard working the Excel MVPs were in particular...

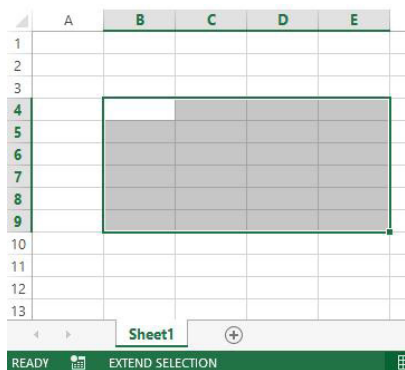
We'll provide more on the new features previewed in future newsletters once Microsoft reveals its hand. Watch this space.



Roger Glover (left) and Ken Puls duke it out as to who has to pay for Charles Williams' pint...

Reader's Question

I inadvertently seem to have frozen my cell in an Excel spreadsheet, in that time I move my cursor, it highlights all of the cells from an anchored point. How can I cancel this behaviour?



This issue is usually explained by accidentally activating the 'Extend Selection' functionality. This can be confirmed by checking whether this functionality is displayed in the status bar (pictured above). This functionality can be toggled on and off simply by pressing the F8 function key.

Upcoming SumProduct training courses

Sydney 13th-14th Jan 2014: Financial Modelling 101

Melbourne 15th-16th Jan 2014: Financial Modelling 101

Sydney 3rd-4th Feb 2014: Power of Power Pivot

Brisbane 5th-6th Feb 2014: Power of Power Pivot

Melbourne 10th-11th Feb 2014: Power of Power Pivot

Hong Kong 10th-13th Jun 2014: Strategic Planning, Forecasting & Budgeting

Perth 21st-22nd Jul 2014: Financial Modelling Fundamentals

Singapore 18th-21st Nov 2014: Strategic Planning, Forecasting & Budgeting

Key Strokes

Each newsletter, we'd like to introduce you to several useful keystrokes you may or may not be aware of. This month we thought we'd take a time-out:

Keystroke	What it does
CTRL + ;	Enters today's date (does not update)
CTRL + SHIFT + ;	Enters the current time (does not update)
CTRL + SHIFT + 3	Converts numbers to date format

There are over 540 keyboard shortcuts in Excel. For a comprehensive list, please download our Excel file at <http://www.sumproduct.com/thought/keyboard-shortcuts>.

Our services

We have undertaken a vast array of assignments over the years, including:

- Business planning
- Building three-way integrated financial statement projections
- Independent expert reviews
- Key driver analysis
- Model reviews / audits for internal and external purposes
- M&A work
- Model scoping
- Project finance
- Real options analysis
- Refinancing / restructuring
- Strategic modelling
- Valuations
- Working capital management

If you require modelling assistance of any kind, please do not hesitate to contact us at contact@sumproduct.com.

Convert others!

These newsletters are not intended to be closely guarded secrets. Please feel free to forward this newsletter to anyone you think might be interested in converting to "the SumProduct way".

If you have received a forwarded newsletter and would like to receive future editions automatically, please subscribe by completing our newsletter registration process found at the foot of any www.sumproduct.com web page.

Any questions?

If you have any tips, comments or queries for future newsletters, we'd be delighted to hear from you. Please drop us a line at newsletter@sumproduct.com.

Training

SumProduct offers a wide range of training courses, aimed at finance professionals and budding Excel experts. Courses include Excel Tricks & Tips, Financial Modelling 101, Introduction to Forecasting and M&A Modelling.

Check out our more popular courses in our training brochure:



Drop us a line at training@sumproduct.com for a copy of the brochure or download it directly from <http://www.sumproduct.com/training>.