

# *Business & Management*



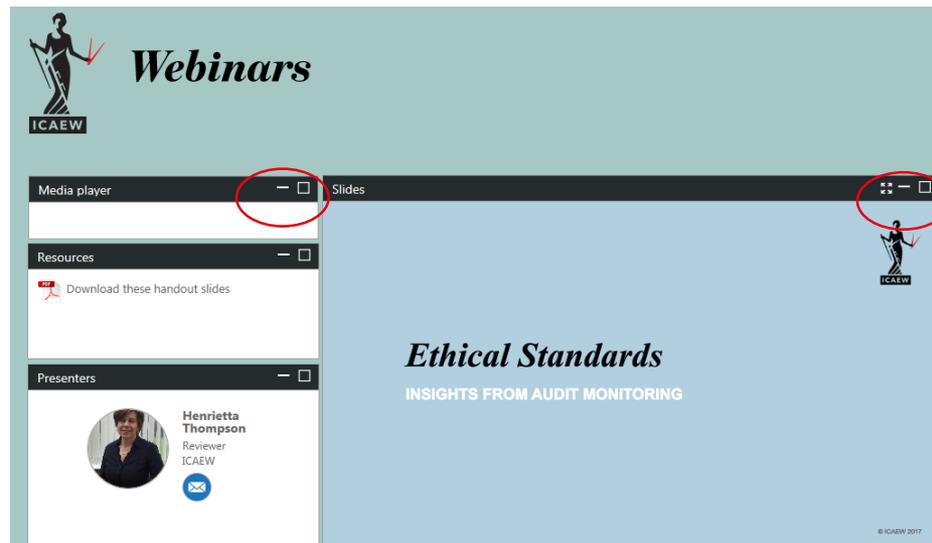
**Excel skills**

**John Tennent**

**5 December 2017**

The webinar will begin shortly...

- You can customise the webinar console, move and resize the widgets:



- You can also minimise and maximise the widgets by clicking on the icons. The icons are located in the dock at the bottom of the console:



- You can submit questions using the Q+A widget at any time during the webinar
- Audio problems? - ensure your volume is turned on and refresh your webpage

# *Business & Management*



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## *Today's presenter*



## *John Tennent*

- Business consultancy
- Business training
- Business modelling training
- Model creation

[www.corporateedge.co.uk](http://www.corporateedge.co.uk)

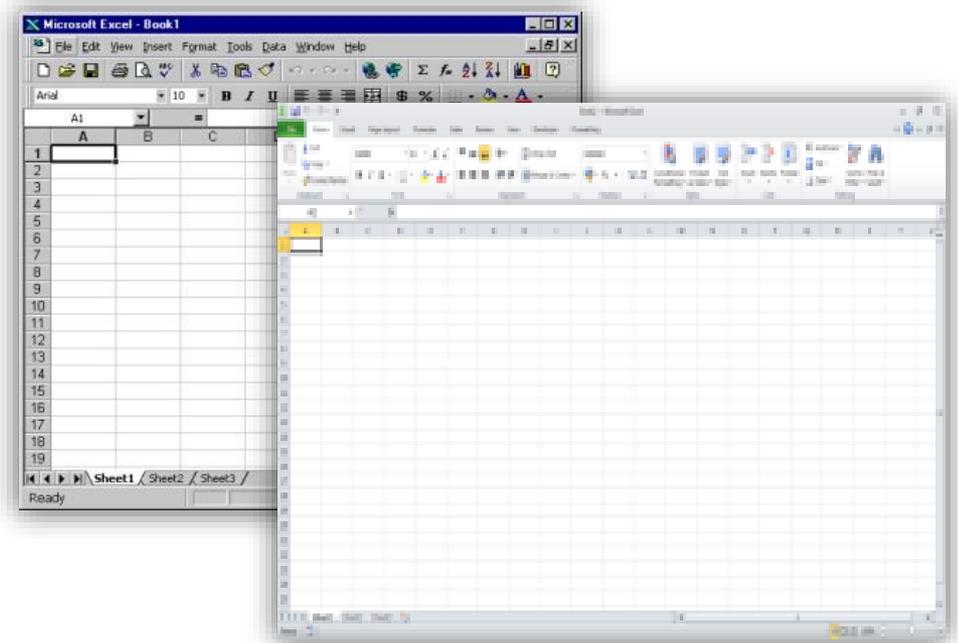
John-tennent@corporateedge.co.uk

# *Aim*

**The aim of the webinar :** To explore a range of Excel techniques, functions and features to help you in management reporting

Builds on 2016 webinar that covered a range of useful functions and features – these ones specific to data and reporting

All techniques can be applied in Excel 2003 (version 11) through to 2016 (version 16) – except Sparklines (2010 onwards)

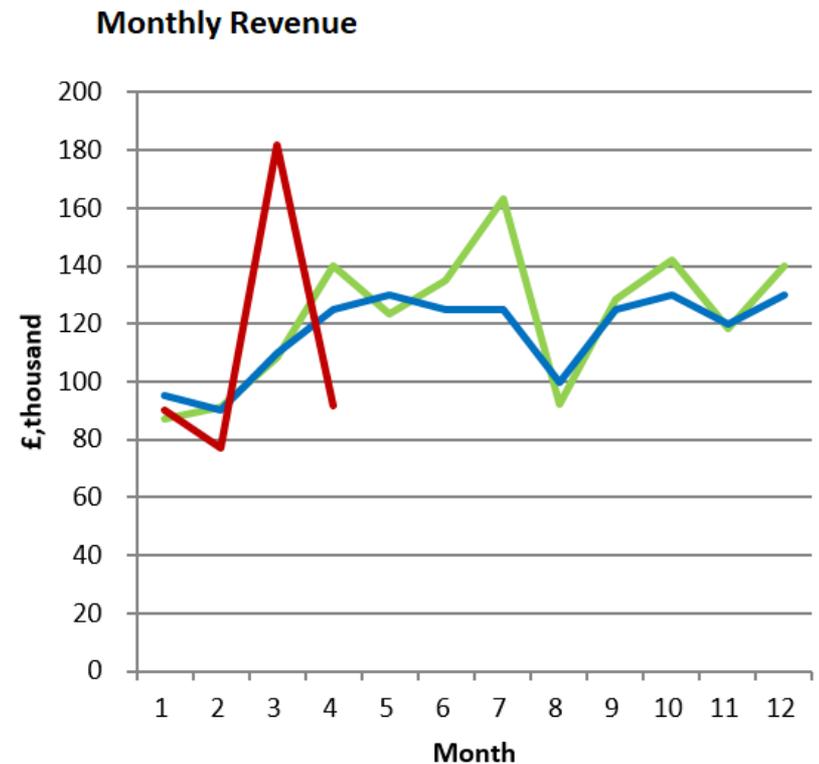


# Content

- Cleaning data
- INDEX MATCH much better than VLOOKUP
- Pulling data across from a holding area
- Selecting high and low variances
- Input data validation
- Graphing of values including using NA

## Top 5 adverse % variances - Actual v Budget

1	Revenue	-27%
2	Gross Profit	-15%
3	Utilities	-8%
4	Depreciation	-7%
5	Rent	0%



## *Cleansing functions to manipulate data*

- **=ISNUMBER(Data)** - To test if data is numeric or text use
- **=TRIM(Text)** – Removes spaces before and after text
- **=LEFT(Text, Number of Letters)** – Takes the left number of letters
- **=RIGHT(Text, Number of Letters)** – Takes the right number of letters
- **=MID(Text, Start at Letter Number, Number of Letters)** – Takes the middle of the text with a start point and number of letters
- **=CLEAN(Text)** – Removes non printable control characters (such as carriage return)
- **=SUBSTITUTE(Text, old text, new text)** – Finds the old text and replaces it with the new text
- **=VALUE(Text)** – Converts a text string into a number
- **=LEN(Text)** – the number of characters in a text string

## *Cleansing functions to manipulate data*

	A	B	C	D	E	F	G
1	<b>Cleansing Data</b>						
2							
3	<b>Data Type</b>	<b>Data</b>		<b>Cleansing</b>		<b>Data X 3</b>	
4							
5	Normal	87.5		87.5		262.50	
6		-215.68		-215.68		(647.04)	
7							
8	10 Characters	*****87.5		*****87.5		#VALUE!	
9		***-215.68		***-215.68		#VALUE!	
10							
11	Europe notation	87,5		87,5		#VALUE!	
12		-215,68		-215,68		#VALUE!	
13							
14	Control characters	87.5		87.5		#VALUE!	
15		-215.68		-215.68		#VALUE!	
16							
17	Comma separated	87.5,		87.5,		#VALUE!	
18		-215.68,		-215.68,		#VALUE!	
19							
20	Minus on the wrong side	87.5		87.5		262.50	
21		215.68-		215.68-		#VALUE!	
22							

# *INDEX MATCH v VLOOKUP*

=**INDEX**(Array, Row Number of Array)

=**MATCH**(Value, Array, Type) Type = 0 is exact Match

=**INDEX**(Column with prices, **MATCH** (Fruit, Column with all Fruit Names, 0))

=**IFERROR**(Function, Value if error)

=**IFERROR**(**INDEX MATCH**,0)

Better than **VLOOKUP** – significantly faster, the account balance can be on the left of the account code and not in alphabetical order.

# *INDEX MATCH v VLOOKUP*

	A	B	C	D	E	F	G
1	Fruit Pricing						
2							
3							
4		Apple	0.15				
5		Pear	0.20				
6		Banana	0.18				
7		Grape	0.01		Lemon	Price is:	
8		Orange	0.28				
9		Mango	0.45				
10		Lemon	0.12				
11		Strawberry	0.05				
12							

# *Pulling data from a holding area*

	B	C	D	E	F	G
3	<b>Actual - Year to date</b>					
4			<b>Jan-17</b>	<b>Feb-17</b>	<b>Mar-17</b>	<b>Apr-17</b>
5	<b>Income Statement</b>					
6	Revenue		(90,235.45)	(167,489.25)	(349,147.25)	(440,722.82)
7	Cost of sales		43,178.14	94,217.84	154,742.25	182,323.01
8	Staff cost		32,954.11	68,441.56	99,885.14	131,827.15
9	Rent		3,437.50	6,875.00	10,312.50	13,750.00
10	Utilities		3,001.25	6,143.25	9,247.55	12,486.23
11	Other		2,451.68	5,993.12	9,611.47	11,817.02
12	Depreciation		4,125.58	9,284.87	13,609.45	18,013.61
13	Interest		27.50	48.90	102.40	130.87
14			(1,059.69)	23,515.29	(51,636.49)	(70,374.93)
15						

# Using *OFFSET*

Indirect cell referencing to enable flexible cell linkage

=OFFSET (Anchor cell, Rows Away, Columns Away)

	A	B	C	D	E	F	G
1		2					
2		22		11	22	33	

**=OFFSET(C2,0,B1)**

# *Using OFFSET*

For a single cell:

=OFFSET (Anchor cell, Rows Away, Columns Away)

For a block of cells:

=SUM (OFFSET (Anchor cell, Rows Away, Columns Away, Height, Width))

Best practice is to keep either the Row or Column zero to make it easier to audit and validate.

# *Management Accounts data*

	A	B	C	D	E
1					
2					
3		Month	2		
4					
5					
6					
7			<b>Year to Date</b>		
8			<b>Actual</b>	<b>Budget</b>	<b>Variance</b>
9			Feb-17	Feb-17	Feb-17
10					
11		<b>Income Statement</b>			
12		Revenue			0.00
13		Cost of sales			0.00
14		Staff cost			0.00
15		Rent			0.00
16		Utilities			0.00
17		Other			0.00
18		Depreciation			0.00
19		Interest			0.00
20			0.00	0.00	0.00
21					

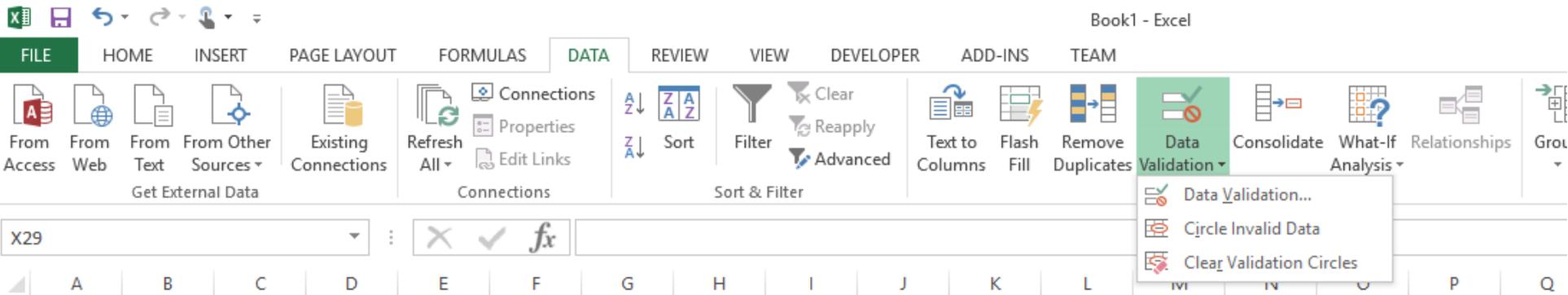
## *Selecting high and low variances*

**=MAX**(number, number) takes largest in series or **=MIN**(number, number) takes smallest in series – much better than multiple IFs

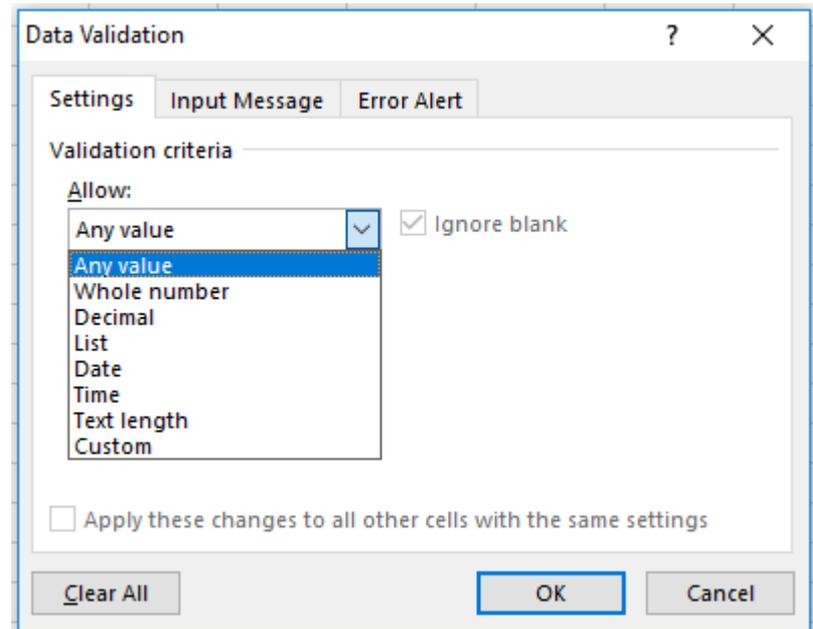
**=LARGE**(Array, Position) takes the position largest in series or **=SMALL**(Array, Position) takes Position smallest in series

Then INDEX MATCH to identify the words. However the variance (LARGE AND SMALL) needs to be in the MATCH not the value

# Input data validation

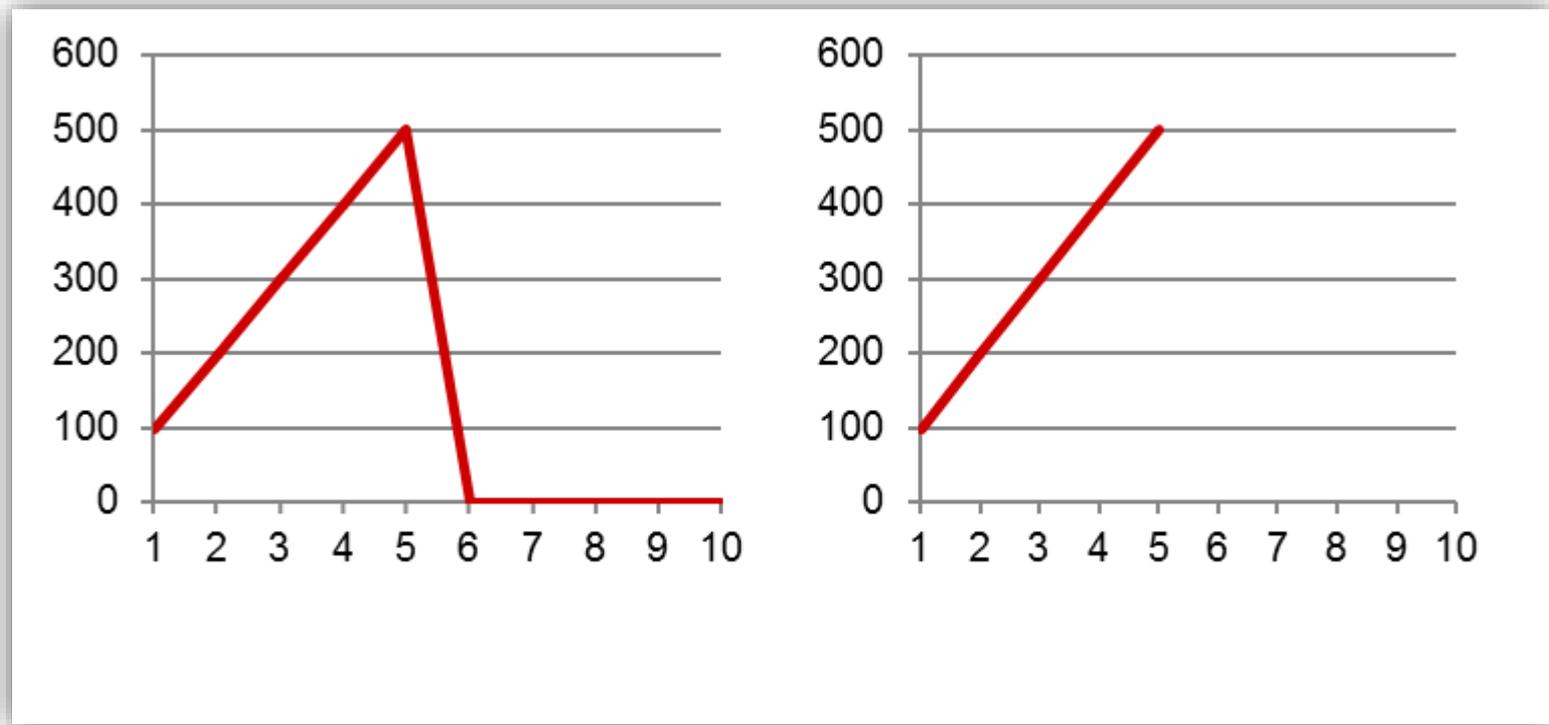


Lots of options to control the way data is entered, validated and error messages returned

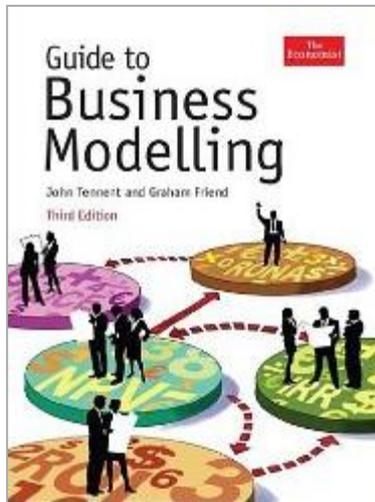


## *Graphing of values including using NA()*

**=NA()** no value available – stop graphs dropping to zero



# *Build your own*

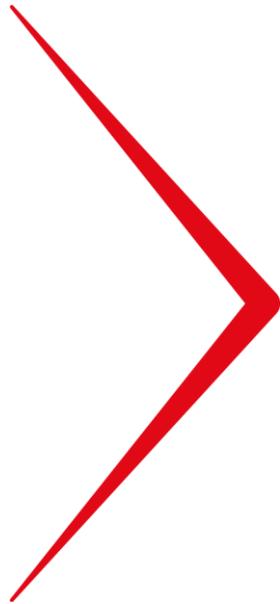


Best way is to have a go yourself

We are happy to help, just email me at:

[John-tennent@corporateedge.co.uk](mailto:John-tennent@corporateedge.co.uk)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Revenue												
Expenses												
Profit												



*Any  
questions?*

# *Business & Management Webinar and event programme*

## Free webinars

*Stats skills for Excel – the basics*

24 January **12.30pm**

**[lcaew.com/lunchjan](http://lcaew.com/lunchjan)**

*Practical password policies*

8 February **12.30pm**

**[lcaew.com/lunchfeb](http://lcaew.com/lunchfeb)**

*Forecasting without fear*

20 February **10.00am**

**[lcaew.com/bamfebwebinar](http://lcaew.com/bamfebwebinar)**

*Bribery and corruption update*

28 February **12.30pm**

**[lcaew.com/lunchfeb2](http://lcaew.com/lunchfeb2)**

## Free event

*Presenting with confidence*

7 March

**[lcaew.com/bammarevent](http://lcaew.com/bammarevent)**

**View our 2017/2018 webinar  
and event programme**

**[lcaew.com/bamevents](http://lcaew.com/bamevents)**

# *Business & Management*

**THANK YOU FOR ATTENDING**

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