

Creating a Dashboard in Microsoft Excel







Contents

Table	25	
1.	Make your data into a table	4
2.	Name the table	4
Pivot	Tables	5
1.	Creating a pivot table	5
2.	Field values	7
3.	Sorting & Filtering a pivot table	
4.	Refreshing data in a Pivot table	9
5.	Recommended Pivot Tables	9
6.	Pivot table charts	10
Work	king with Pivot tables	11
7.	Changing value field settings	11
(Custom value name	12
5	Summarise values by	12
5	Show values As	13
8.	Changing the sort order	14
9.	Custom sort order	15
10.). Grouping dates	16
Work	king with Charts	17
11.	. Anatomy of a chart	17
12.	Creating Pivot charts	18
13.	Chart design	19
14.	Change chart type	19
15.	Chart elements	20
16.	. Hide Value field button settings	21
17.	7. Changing the data series	22
ſ	Making Rows/columns broader	22
ſ	Make each data point a different colour	23
Creat	ting an Excel Dashboard	24
18.	Preparing your Workbook	24
19.	. Formatting your Dashboard	24
Å	Add Title	24
ŀ	Hide Gridlines, Headers & the formula bar	





	20.	Slicers	24
	For	matting a Slicer	25
	Link	king the slicer to your charts	26
Re	freshi	ng the Dashboard	20
	in estin	ווק נווב הפוואספו מ	21





Tables

1. Make your data into a table

		፼ᡨ੶᠅᠂᠇						
		File Home I	nsert Page Layo	out Formulas	Data	Review View	Help 🛛 Tell	me what you want to do
	Pivo	otTable Reco	d Table Pictures	Online S II	Click on t nsert tab	he , He , A	Get Add-ins My Add-ins + Bing Map	People Graph Charts
	2.	. Click on the		Illustratio	ns		Add-ins	•
	Ta	ble command button	Table (Ctrl+T) Create a table to analyze related o	organize and lata.				
	A 1 Name 2 Alain Prost 3 Alia Bhatt		Tables make it ea	asy to sort, filter,	D	E	F	G
			and format data	within a sheet.	ge now	Date registered	Age at registration	Instrument experience
			P Tell me more	re		05/04/2003		Guitar
						09/09/2016		
	4	Andre Agassi	HMP Swansea	14/12/1975		21/03/2003		Guitar

→ Alternative shortcut: Ctrl + T



2. Name the table

It is good practice to name the table as it makes life much easier later when working with formulas. Naming the formula is basically giving your data set a name which will enable you to recognise which data set you need to be working with.

দ্রি 🕹 🤄	÷	Ta	Table Tools Music Mentors data with notes - Excel														
File Home Table Name: [Table2] Resize Table	Insert Page Layout Summarize with PivotTable Remove Duplicates cont to Range	Formula Formula Insert Slicer	s Data	Review	View perties en in Browser nk	Help C	Design der Row I Row ded Rows	 First Column Last Column Banded Columns 		1. Clic	k on the	the ta Desigi	ble & n tab	seleo	t		
Properties			Ex	ternal Table D	lata			Table Style Options	_				lable	otyles			
B5 A A 1 Name 2 Alain Prost 3 Alia Bhatt 4 Andre Agassi	Prison HMP M HMP Hc HMP Sw	2. Rei exam	name ple, "	the t Book	able. ingDa	For ita"		H I Ihours V Points per hou 10 23 29	r • 3 1 2	L !	1 N	0	P	Q	R	S	T





Pivot Tables

1. Creating a pivot table

A	AutoSav	e 💁 🕞 🖓	~ (J ~ <u>~</u>	Music N	1entors data with r	notes.xlsx e ^q	- Saving	Q	Search	
Fi	ile	Home Insert	Page 1. Clic	k on th	ne Insert tab	eview	View H	Help Ta □ -	able Desig	an IIIII
PivotTable		Pecommended Table	Illustrations	🕤 My	Add-ins 👻 ᅚ	Recommer Charts		⊾ ~ ⊫≟ ~ <u>.</u> ~	Maps Pi Ý	votChart v
	2. Click on Pivot Ta		Table	•	Add-ins Date of birth	- Gender	C	harts Age now		⊡ ▼ Date re
2		1 Alain Prost	HMP Manch	ester	09/06/19	972		47		
3		2 Alia Bhatt HMP Hollow		/ay	02/02/19	950		70		
4		3 Andre Agassi	HMP Swanse	ea	14/04/19	957		62		
5		4 Ben Okri	HMP Manch	ester	23/04/19	984		35		

Д	utoSave	0n • 🛱 🐇) ~ (4	~ ~	Music Men	tors data with not	es.xlsx A ^Q - Sav	ved	,∕⊂ Se	arch	
Fi	le He	ome Insert	Pag	e Layout	Formula	s Data	Soloct the	table		ant to b	ase the nivet table
						Z	. Select the	lable	you w		
Pai	rticipants	- I X	\checkmark	<i>fx</i> Da	ive Robson	0	n. Here yoı	u can s	see the	e table na	ame "participants".
	Pof 1	Namo	Î D	ricon	T Do	to of birth	sing a table	e ensu	ires vo	u have a	dynamic data source
2	itter	1 Alain Prost	<u> </u>	MP Mane	hostor	09/06 fr	or vour nive	nt tabl	, ما		,
ך א		2 Alia Bhatt	н	MP Holloy	way	02/02					
4		Andre Agass	i H	MAD Come		14/04/105			52	_	21/03/2003 Plays a
5		4 Ben Okri	. н	Create Pi	ivotTable			?	? ×		09/09/2016 No mu
6		5 Boris Becker	Н	Choose th	o data that you	want to apply to					27/02/2017 Plays a
7		Dave Robsor	n H			I want to analyze					21/03/2008 No mu
8		7 David Attenk	oroug H	● <u>S</u> ele	ect a table or ra	nge				_	17/08/1998 Plays a
9		B David Beckha	am H	D	Table/Range:	Participants			1		31/01/2008 Plays a
10		Diane Kruger	r н	N O Use	an external da	ta source					21/03/2003 No mu
11	1	Diego Marad	lonna H	D	Choose Con	nection					04/05/1999 No mu
12	1	1 Dilip Kumar	н	Ν	Connection na	ime:					23/07/2013 No mu
13	1	2 Emma Barne	ett H	N Use	this workbook	's Data Model					17/08/1998 No mu
14	1	B Emmanuel N	lacron H	N Change							19/02/2004 No mu
15	1	4 Enid Blyton	н	N CHOOSE W	nere you want	the Proof able re	3. Select N	lew W	/orkshe	eet	17/08/1998 Plays a
16	1	5 Fiona Bruce	н	N O <u>N</u> ev	v Worksheet						30/09/1999 <mark>No mu</mark>
17	1	6 Freya Crew	н		ting Workshee	t				_	04/05/1999 No mu
18	1	7 Harper Lee	н	Ν	Location:				1		04/04/2009 Plays a
19	1	B Hone Heke	н	Choose w	hether you wa	nt to analyze multipl	e tables			_	09/09/2016 Plays a
20	1	Jacina Arder	n H	N Add	this data to th	e Data Model					02/06/2000 Plays a
21	2	Jack Tate	н	N						_	05/04/2003 Plays a
22	2	1 Jane Goodal	I H	Γ			ОК		Cancel		04/05/1999 Plays a
23	2	2 Jason Robins	son H	NIP SWalls	sea	29/00/190.	•		00		04/05/1999 Plays a
24	2	3 Joan Chen	н	MP Bronz	efield	16/02/1970)		1	8/02/1900	17/08/1998 No mu
25	2.	4 John Cleese	н	MP Pento	nville	18/09/1963			2	5/02/1900	07/03/2011 No mu
26	2	5 John Steinbe	ck H	MP Pento	nville	28/06/1969			50		21/03/2003 Plays a
27	2	5 Jonny Wilkin	son H	MP Swan	sea	05/06/1985			0	3/02/1900	05/04/2003 No mu
	•	Particpants	Sheet1	Attend	lance Se	rvice feedback	Outcomes	(+)			÷ •





AutoSave 💿 💿 🛱 🍤 🗸 🖓 🗸 🖘 Music Mentors d	ata with notes 🗚 - Saving • 👂 Search	Alice Linell 🔼 🖬 — 🗗 🗙
File Home Insert Page Layout Formulas Dat	a Review View Help PivotTable Analyze Design	🖻 Share 🖓 Comments
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Image: state	Elete Format Cels Editing Editing Lideas Sensitivity ∧
A3 - : × - fx		*
A B C 1 2 3 4 5 7 7 7 7 7 7 7 7 7 7 8 9 9 9 9 10 11 12 13 14 15 15 16 16 16 16 16 16 16 16 16 16	st 4. An empty pivot table is created	N PivotTable Fields * Choose fields to add to report: Image: Choose fields to add to report: Image: Choose fields to add to report: Search Image: Choose fields to add to report: Image: Choose fields to add to report: Image: Choose fields to add to report: Ref Image: Choose fields to add to report: Image: Choose fields to add to report: Image: Choose fields to add to report: Ref Image: Choose fields to add to report: Image: Choose fields to add to report: Image: Choose fields to add to report: Ref Image: Choose fields to add to report: Image: Choose fields to add to report: Image: Choose fields to add to report: Ref Image: Choose fields to add to report: Image: Choose fields to add to report: Image: Choose fields to add to report: Image: Choose fields to add to report: Image: Choose fields to add to report: Image: Choose fields to add
16		Drag fields between areas below:
118 19 20 21 22	5. The columns from your table appear in the fields	T Filters
23 24 25 26 27 28 29 5 heet1 Participants Attendance Servi	e feedback Outcomes	Activate Windows Update





8. As the name field is text the pivot table assumes you want to **Count** the number of records in the Name



	AutoSave On	• 🛯 '0	Q.^. ≞	Music Mento	ors data with notes	A ^Q - Saved →	♀ Searce	h		Alice Linell) 🖬 – 🗗 🗙
F	ile Home	e Insert F	age Layout	Formulas D	Data Review	View Help	PivotTable Ana	lyze Design			🖻 Share 🛛 🖓 Comments
Su	ototals Grand	i Report Bl	ank vs → Colu	Headers 🗌 I	Banded Rows Banded Columns					_	
	La	ayout		PivotTable Style (Options			Piv			^
D	-	• = × •	/ <i>fx</i> 4					9. Add comple	exity to your		*
	А		В	С	D		E F	Pivot table To	show how	le Fielde	
1										le Fields	* ^
2	Count of Na	ame Column	Labels					many of the at	ttendees from	o add to report:	<
4	Prisons	 No mus 	cal experience	Not recorded	Plays a musical	instrument G	rand Total				Ö
5	HMP Bristol		1	L		4	5	each prison alr	ready had		/-
6	HMP Bronzel	efield		3 1		5	9				A
/	HMP Hollow	vay) 1 1		3	9	musical experi	ience, add the		
9	HMP Penton	nville	-	· 1		5	8		,		
10	HMP Swanse	ea	3	3 1		3	7	field Musical e	experience to	n	
11	Grand Total	1	20) 3	1	24	47				
12										Date registered	
13										lusical experience	
14										vent experience	w
16											
17									Dr	ag field areas below:	
18										Filters	III Columns
19											Musical experience
20											
21											
23											
24										Rows	2: Values
25									P	rison 👻	Count of Name 👻
26											
27										Activato M	lindows
29										Activate W	And OWS
	► M	Ausical experi	ence Partici	pants Attend	dance Service	e feedback	Outcome: (+)	1		Defer Layout Update to Settings	Update Windows. Update

2. Field values

Numberical fields can be displayed in a number of ways in Pivot tables, for example you can display fields as a percentage of the grand total.

AutoSave 💿 o 🖫 🏷 - 🖓 - ⇒ Music Mentors data v	with notes A ^R - Saving 🔎 Searc	ch Charles	Alice Linell	• - • ×
File Home Insert Page Layout Formulas Data ProofTable Image Commended Table Image Commended Image Commended	Review View Help PivotTable / Models ~ Eff Get Add-ins artArt 6 My Add-ins ~ Recom Addiant	1.Highlight the fields you want to display as a percentage.	Timeline Link Comment	L ^C Share □ Comments Text → Ω Symbol Symbols
A B C Prisons Count of Name 4 MMP Bristol HMP Bronzefield B T ≡ ∞ × A × ⊞ × %	E F 6 9 ∰ 	G H I J K L M N O P Q R	PivotTable Fields Choose fields to add to report: Search Ref	× × @* 0
1 The Point Leaster HMP Point Leaster Ib HMP Point Leaster Ib HMP Point Leaster Ib HMP Point Leaster Ib III Grand Total III Grand Total III Grand Total III Grand Total III Sort >	 ✓ No Calculation % of Grand Total % of Column Total % of Bow Total % Ωf 	2. Select Show Value then % of Grand To	ues As and otal	*
Initian X Remoge "Count of Name" 16 X Sugmarize Values By > 18 Singmarize Values As > 19 Show Values As > 20 *-3 Show Datalis	% of Parent Row Total % of P <u>a</u> rent Column Total % of Parent Total Difference From		Drag fields between areas below: T Filters	Columns
22 IIII Value Field Settings 23 PivotTable Options 25 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	% Difference From Running Total In % Rynning Total In Rank Smallest to Largest Rank Largest to Smallest		E Rows 2 Prison V	E Values Count of Name
29 Sheet2 Sheet3 Musical experience Partic	Index fe (+)		Defer Layout Update	ctivate Windows. Update





AutoSave 🕼 🖲 🦻 🌱 🖓 - 🕫 - Music Mentors data with notes 🥀 - Saving 🔹 🔎 Search	Alice Linell (A) 🖬 – 🗗 🗙
File Home Insert Page Layout Formulas Data Review View Help PivotTable Analyze Design	ය Share 🖓 Comments
A Cut Calibri 11 A A A' ≡ ≡ ≫ · 20 Wrap Text Percentage Per	Cell Insert Delete Format ∑ AutoSum ~ 2 ∨ ○ Ideas Sensitivity Styles
$B6 - : \times \sqrt{f_x}$ 19.1489361702128%	
A B C D E F G H I J K L 1 2 -	4. Use the Decrease decimal
4 HMB Pristol 10.6% HMD Prioraefield 19.1% 3. Percentages HMP Holloway 19.1% 3. Percentages HMP Provinsea 14.9% replace the	place command button to round numbers.
10 read Total 100.00% 12 original 13 numbers	Age now Welfare session attendee Date registered Musical experience
16	Drag fields between areas below:
17 18 19 20 21 22	T Filters III Columns
23	≡ Rows ∑ Values
25	Prison Count of Name
26 27 28 28 29 29 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	Activate Windows
 ← Sheet2 Sheet3 Musical experience Participants Attendance Service fe ⊕ ; 	Defer Layout Update to Settings to activate Windows. Update

3. Sorting & Filtering a pivot table

Simple sorting and filtering work exactly the same as elsewhere in Excel.

AutoSave 💽 🕞 🏷 - 🖓 - マー Music Me	ntors data with notes A ^R - Saved •	Search			Alice Linell 🔼 🖬 —	o x
File Home Insert Page Layout Formulas	Data Review View Help PivotTable	Analyze Design			🖻 Share 🖓	Comments
PivotTable Name: Active Field: += += = <td< td=""><td>→ Group Selection Ingroup Group Field Group Field Group Field Group Field Group Field Group Field</td><td>Refresh Change Data Source > Data</td><td>Clear Clear Clear Clear Actions</td><td>Fields, Items, OLAP Relationship & Sets \sim Tools \sim Calculations</td><td>s PivotChart Recommended PivotTables Tools Show</td><td>^</td></td<>	→ Group Selection Ingroup Group Field Group Field Group Field Group Field Group Field Group Field	Refresh Change Data Source > Data	Clear Clear Clear Clear Actions	Fields, Items, OLAP Relationship & Sets \sim Tools \sim Calculations	s PivotChart Recommended PivotTables Tools Show	^
A3 • : × ✓ fx Count of Name	3					~
A B C 1 2 3 Count of Name 4 Prisons √2 Sort A to Z 1 3 √2 Sort Z to A More Sort Options √2 Quer Filter From "Pilson" 3 4 4 Autor Sort Options √2 Search	D E ed Plays a musical instrument Grand Total 1 5 9 1 4 9 5 8 3 7 24 47 4 47	F G	H I J	K *	PivotTable Fields Choose fields to add to report: Search Ref Vame Prison Date of birth Gender Age now Date registered Ususial experience Distrimmere providence	× × ⊗ • •
C Select All) C Hulp Britol Hulp Swanse OK Cancel Z7 28 29 Musical experience Participants Att	Click next to the column headin and filtering o	ne row or ng for sorti ptions	ing		Drag fields between areas below:	v v v v w s. Update





4. Refreshing data in a Pivot table

If you make changes to the data set being used to the pivot table, you might need to refresh the chart so that the changes are immediately reflected in the chart.

AutoSave 💿 💿 🛱 🏷 🗸 🖓	u → → → → → → Music Mentors data with (notes 🗚 - Saved 🗸	₽ Search					
File Home Insert Page	Layout Formulas Data Revi	ew View Help	PivotTable Analyze	Design				
PivotTable Name: Active Field: PivotTable2 Count of Name Field Settings PivotTable Active	→ Group Select Drill Drill Down Up ~ -= Field Group Group	on Insert Insert Slicer Timeline O Filter	Filter Fonnections	Change Data Jource ~	Clear Select Actions	Move PivotTable	Fields, It & Sets	ems, O s ~ Too Calco
B6 👻 : 🗙 🗸	<i>fx</i> 19.1489361702128%							
A B	C D	E	F	G	H I	J K L	MN	O P
1								
2 2 Drivens - Count of		-						
4 HMP Bristol	llibri → 11 → A [*] A [*] 🖅 → 9							
5 HMP Bronzefield	I ≡ 🌺 - A - 💾 - 👯 🐝 <	ji						
6 HMP Holloway 1	19%							
7 HMP Manchester	🖹 <u>С</u> ору							
8 HMP Pentonville	Format Cells							
9 HMP Swansea								
10 (blank)	Number Format							
11 Grand Total	Befresh							
13	Sort >							
14	K Remove "Count of Name"							
16	Summarize Values By							
18	Show Values As							
19 +:	E Show Details							
21	Value Field Settings							
22								
23	PivotTable <u>Options</u>							
24	Hide Fiel <u>d</u> List							
25								
26								

5. Recommended Pivot Tables

A short cut to creating pivot tables can be to use the recommended Pivot table function.

AutoSave 💿 💿 📴 🌱 - 🖓 - マー 📼 Music Mentors data fo	for Excel Sorting & Analys A ^R - Save	d 🔎 Search			• • •	Alice Linell 🔒	⊞ –	- 0 ×
File nome Inser Page Layout Formulas Data	Review View Help						ය Share	Comments
PivotTable Recommended DuestTables	D Models ~ 🗄 Get Add-ins martArt creenshot ~ 🖓 My Add-ins ~	Recommended Charts	Maps PivotChart * * * * * * * * * *	Line Column Win/ Loss	Slicer Timeline	Comment	Text γ	[Equation ~] Symbol





6. Pivot table charts

AutoSave 💿 D 🌐 ヴィ C ジー マ Music Mentors data with notes R ^R - Saved ・ 🛛 🔎 Search	Alice Linell 🔼 🖬 — 🗇 🗙
File Home Insert Page Layout Formulas Data Review View Help PivotTable Analyze Design	ය Share 모 Comments
Provitable Name: Active Field: Provitable2 Count of Name Drift Doll	ships PrvotChart Recommended PrvotChart Recommended Tools Show
D6 • 1 × √ ft 5	PivotChart 🗸
A B C D E F G H I J	Insert a PivotChart tied to the data in this PivotTable.
1	v ricius v X
² Click on the nivet table	dd to report:
3 Count of Name Column Labels Intercorded Plays a mulcial instrument Grand Total	e anu
5 HMP Bistol 1 4 5 thon on the Divet Chart	2
6 HMP Bronzefield 3 1 5 9 there is a state of the state o	
7 HMP holloway 6 3 9	
8 HMP Manchester 4 1 4 9 COMMAND DULLON	
9 HMP Pentonville 3 5 8	
10 HMP Swansea 3 1 3 7	Age now
11 Grand Total 20 3 24 47	Date registered
	Musical experience
	Instrument experience
15	Total hours
16	Drag fields between areas below:
18	T man
19	I Filters III Columns
20	Musical experience 👻
21	
22	
23	E Rouve E Values
24	
	Count of Name
20 27 27	
28	Activate Windows
29	Go to Sattings to activate Windows
Sheet1 Participants Attendance Service feedback Outcomes 🕂 : 4	Defer Layout Update to Settings to activate windows. Update
	III III + 100%







Working with Pivot tables

7. Changing value field settings

In pivot tables you can select different types of setting for the values portion of your Pivot table. You can:

- Give the value set a custom (display) name
- Specify how you want to summarise values
- Specify how you want to display values









Custom value name

AutoSave 💽 ● 🕞 🥬 × 🖓 × 😌 × 🖘 Trainer	r - Data Essentials training data .xlsx \mathfrak{A}^{R} - Saved \swarrow Search	Alice Linell 🗛 🖬 — 🗗 🗙
File Home Insert Draw Page Layout Paste \checkmark \checkmark $11 \rightarrow A^{+} A^{-}$ \equiv B $I \ \sqcup \ \lor \ \boxdot \ \lor \ \bigtriangleup \ \lor \ \bigtriangleup \ \lor \ $ \equiv \equiv Clipboard \Box $Font$ \Box	Formulas Data Review View Help Power $ = = & & & & & & \\ \hline = = = = & & & & & \\ \hline & & & & & & \\ \hline & & & & &$	you would like to
B3 • : $\times \checkmark f_x$ Sum of Client II		~
A B C D 1	E F G H I J M Value Field Settings ? X Source Name: Client ID	PivotTable Fields Choose fields to add to report: Search Client ID Job Title Organisation Drag fields between areas below: Filters Columns
16 17 18 19 20 21	Min Product V Number Format OK Cancel	Rows Σ Values Years ✓ Sum of Client ID Quarters ✓ ✓
• Organisation - Pivot Sheet9 BookingD	ata Session Guidelines (+)	

Summarise values by

AutoSave 💿 ● 🖫 🏱 × 🖓 × 👳 Traine	r - Data Essentials training data xlsx هم - Saved جمع Search	Alice Linell 🗚 🖻 — 🗇 🗙
File Home Insert Draw Page Layout Image: A state of the state of	Formulas Data Review View Help Power Pivot Pivot Table Analyze Design = >> @eneral @conditional Formatting * Image: Analyze Design	G Share □ Comments ○ ↓
Paste ↓ B I U ∨ ⊞ ∨ ▲ ∨ ≡ : Clipboard 5 Font 5 = :	Alignment By	Id & Ideas Sensitivity Share Webex ect ~ Ideas Sensitivity Webex ~ This File ~
A B C D 1 A B C D 2 B Row Labels ▼ Sum of Client ID 4 #2019 3003 5 #2020 1183	E F I J K L M P Value Field Settings ? X	ivotTable Fields • × hoose fields to add to report:
6 Grand Total 4186 7 8 9 9 10 11	Sustom Name: In of Client ID 2. Select how you Summarize Values By Show Values As Summarized Summarize value field by Choose the type of calculation that you want to use to summarize Summarize	u want your field
12 13 14 15 16	data from the selected field	T Filters Columns
19 20 21 • • · · · Organisation - Pivot Sheet9 BookingE	Number Format OK Cancel	Vears Vears





Most common calculations used to summarise data:

Function	Summarizes
Sum	The sum of the values adds all the values in the selected data range. This is the default
	function for numeric values.
Count	The number of values. The Count summary function works the same as the COUNTA
	worksheet function. Count is the default function for values other than numbers.
Average	The average of the values. The average is the mean average of the numbers. To
	calculate: Excel adds up all the numbers, then divides by how many numbers there
	are. In other words it is the sum divided by the count.
Max	The largest value.
Min	The smallest value.
Product	The product of the values. The product is the result of multiplying the numbers eg the
	product of 2 and 3 is 6.

Show values As

AutoSave 💿 💿 🔓 🍤 🗸 🖓 🤟	➡ Trainer - Data Essentials training dat	ta .xlsx A ^q - Saved		Alice Linell AL	b – c ×
File Home Insert Draw Pag	e Layout Formulas Data Rev	riew View Help Power Piver Conditional Formatti	rot PivotTable Analyze Designg \checkmark $\boxed{22}$ Insert \checkmark \sum \checkmark $\boxed{2}$	gn 🖉	Share Comments
1. Select the tab Show \	/alues As	Image: System Image: System Image: System Image: System Image: System Image: System Image: System Image: System	Image: Delete Image: Cells Image: Cells <td< th=""><th>k Find & Ideas Sensitivity select v Ideas Sensitivity</th><th>Share Webex This File ~ Webex ~</th></td<>	k Find & Ideas Sensitivity select v Ideas Sensitivity	Share Webex This File ~ Webex ~
A B C 1 2 3 Row Labels ▼ Client ID 4 ⊕2019 84.62%	D F G Value Field Sett	H I J ? X	K L M	PivotTable Fields Choose fields to add to report:	× × • &
5 ⊮2020 15.38% 6 Grand Total 100.00% 7	Source runn: Client ID Summarize Values By Show Values As	_		Client ID Job Title	
9 10 11 12 13 14	ow values as of Column Total se field: aard via? poport, access neeeds convedge level	Base item: da	Select how you wa ta	ant to display the	e nns
15 16 17 18 19 20	Quarters Quarters Number Format	OK Cancel		Rows Years Quarters ▼	Σ Values Client ID ▼
21 • ··· Organisation - Pivot Sheet9	BookingData Session Guidelines	+		Defer Layout Update	Update

Most common ways of displaying data:

Use this calculation	То
No calculation	Turn off custom calculation.
% of Column	Display all the values in each column or series as a percentage of the total for
Total	the column or series.
% of Row Total	Display the value in each row or category as a percentage of the total for the
	row or category.





Rank smallest	Display the rank of selected values in a specific field, listing the smallest item in
to largest	the field as 1, and each larger value with a higher rank value. Create a new
	column for Rank if you want to show the specific amounts too.
Rank largest to	Display the rank of selected values in a specific field, listing the largest item in
smallest	the field as 1, and each smaller value with a higher rank value. Create a new
	column for Rank if you want to show the specific amounts too.

8. Changing the sort order

ଌୢୄୢୄଽୢ୶								ole Tools	
File Home Insert P	age Layout	Formulas	Data	Review	v View	Help	Analyze	Design	♀ Tell me wł
Paste	11 • A A A		: &> + : €≣ →≣	sp M ≣ M	rap Text erge & Cente	Ge r ▼ 5	eneral	▼ €.0 .00 .00 →.0	Conditional Forr Formatting ▼ Ta
Clipboard 12 Font	к ¹		Aligr	iment		la	Number	1a	Style
A B A B A B A B A B A B A B A B A B A B	∫x 29 C	1.Rig value want	ht mous e in the c to sort	se click data se	a on a et you		H I	J	K
4 Email 5 Internet	19 1	\nearrow							
6 Internet search 7 Newsletter 8 Twitter 9 Unknown	Calibri \rightarrow 1 B $I \equiv$		aĭ 😨 - 9 ⊡ - 500	6) 🗄	Heard v	ia?	nd the so	rt	42
11 Grand Total 12 13 14	E <u>C</u> opy E <u>F</u> ormat C Number F	ells Forma <u>t</u>			order yo	ou requ	iire		
15	Refresh								
16 17	X Remove	Count of Cust	tomer ID"	Z↓ S Z↓ S	ort Smallest to ort Largest to	Largest Smallest			
18 19	Su <u>m</u> mariz	ze Values By)	· <u>I</u>	<u>M</u> ore Sort Optio	ons			
20 21	+∃ Show D <u>e</u> t	ails	,	_					
22 23	Value Fiel	d Setti <u>n</u> gs e Options			More	sort op	otions allo	ws	
◆ → … DE SH Client	Hide Fiel	<u>l</u> List		Im	order	input	a specific	SOL	
Deady									





9. Custom sort order

Go to File > Options > Advanced

Excel Options		?	×
General	Allow user-defined XLL functions to run on a compute cluster 🛈		
Formulas	Cluster type:		
Data	When calculating this workbook: Online Feedback A		
Proofing	Update links to other documents		
Save	Set precision as displayed		
Language	Use 1904 date system		
Ease of Access	✓ Save external link values		
Advanced	General		
Customize Ribbon	☐ Ignore <u>o</u> ther applications that use Dynamic Data Exchange (DD		
Quick Access Toolbar	Ask to update automatic links 1. Select the option	Edit	
Add-ins	Show add-in user interface errors Custom Lists		
Tourt Conton	\checkmark Scale content for <u>A</u> 4 or 8.5 x 11" paper sizes		
Trust Center	At startup, open all files in:		
	Web Options		
	✓ Enable multi-threaded processing		
	Create lists for use in sorts and fill sequences: Edit Custom Lists		
	Lotus compatibility		
	Microsoft Excel menu kev: /		
	Transition navigation keys		
	Latur compatibility Settings for EScheet1		
	Transition <u>f</u> ormula evaluation		
	Transition form <u>u</u> la entry		-
	OK	Ca	ancel





You can also choose to import the values from a range of cells.

10. Grouping dates

In Excel 2016 forward Excel automatically groups dates by months & quarters. If you are working with an Excel version prior to that or you want to change the automatic grouping you can manually group dates.

టెంకా <i>ం</i> ∵≖		DataEssentialsALLDATA-02Mar2020 - Excel			
File Home Insert Page Layout For		O - Toront to do			,Q. Share
Mode Calibri 11 Paste ← Format Painter B I M H H 11 Clipbeard 5 6 6 7 6 7 7 6 7 10 11 10 11 10 11	 Right mouse of a date value 	lick on	Bad Good Check Cell Explanatory Styles	Neutral	Editing
A B C 1 2 Row Labels ▼ Count of Customer 77 3 Row Labels ▼ Count of Customer 77 5 ≅ Qir4 77	Grouping ? X	N N O	P Q R S	T U V W	PivotTable Fields PiototTable Fields Search
6 Nov 38 7 Dec 39 8 2020 32 9 = Qtr1 32 10 Jan 18 11 Feb 14 12 Grand Total 109 13 14 15 16	Image: Second to the secon	2. Select you re	the Grouping quire]	
17 18 19 20 21	OK Cancel				Support / access neeeds Knowledge level Enews? Drag fields between areas below:





Working with Charts

11. Anatomy of a chart







12. Creating Pivot charts







13. Chart design



14. Change chart type







15. Chart elements









16. Hide Value field button settings

ଜୁ ୩.୯× ∓				DataE	ssentialsALL	DATA-02Mar20	20 - Excel			
File Home Insert Page Layout Formulas	Data	Revie	w View	v Hel	р ұт	ell me what yo	ou want to d			
$\begin{array}{c c} & & & \\ & & & \\ & & & \\ & &$	&⁄- €≣ ₹	ē₽ v	Wrap Text vlerge & Ce	enter 🔹	General	, €.0 .00 .00 →.0	Condition Formattin	al Formata g - Table -	as Cell Styles •	₽ E Inse
Clipboard 🖬 Font 🕼	Ali <u>c</u>	ynment		G.	Nu	mber r	a	Styles		
Chart 1 🔻 🗄 🗙 🧹 $f_{\rm x}$										
A B C		D	E	F	G	н	I.	J	К	L
1										
3 Row Labels Count of Customer ID										
4 A 5 G. 1. Click on evolve field										
6 hutton in the chart	fCustom	Move <u>U</u>	p							
7 s button in the chart		Move <u>D</u>	own							
9		Move to	Beginning							
10	_	Move to	<u>E</u> nd							
12 0	T	Move to	Report Fil	ter (Catago	vria a)	Knowle	tie knowledge	¢.		
13		Move to) Axis Fields	elds (Ser	ies)	Goo	d knowledge			
14 15 2. Select hide the	Σ	Move to	Values			■ No ł	nowledge			
16 selected button or	•	Hide Val	lue Field Bu	ttons on	Chart	Som	e knowledge			
hide all		Hide All	Field Butto	ns on Ch	art					
	×	Remove	Field					_		
20	0	Value Fie	eld Setti <u>ng</u> s	i				~		
21										





17. Changing the data series

Making Rows/columns broader

A	AutoSave 💽 🖉 🖓 🗸 🗢 🛛 A	ttendee data completed- Creat	tir	_ەم - 1	Alice Linell 🍈 🖻	3 – <u> </u>							
Fil	ile Home Insert Page Layout Forr	nulas Data Review	2. The	rt Analyze De	esign Format	ය Share 🖓							
Seri	Format Selection Reset to Match Style Current Selection Insert Shapes	Abc Abc Abc Shape Styles	Format window will open	Bring Forv	vard × 📮 × 🗐 🗐 🖓 vard × Pare 2 × 1 = 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	cm) cm) ize [S ^							
Cha	art1 ▼ i × √ ƒx =SERIE	\$(Boroughs!\$B\$3,Boroughs!	I\$A\$4:\$A\$32,Boroughs!\$B\$	\$4:\$B\$32,1)		~							
1	A B	С	D E	F	Format Data	Series • ×							
2					Series Ontions								
3	Row Labels T Count of Custor	ner ID	0	• •									
4	Brent	6 V	Westminster 🗾 3										
6	Bromley	5 Walt	Wandsworth 2	1									
7	Camden	5 Tov	wer Hamlets 🌹 1		Series Options								
8	City of London	1	Sutton 5		Plot Series On								
9 10	Faling	1	Southwark	13	<u>P</u> rimary Axis								
11	Enfield	4	Richmond 4 Secondary Axis										
12	Hackney	5	Newham 3		Series Overlap -	Û%							
13	Hammersmith & Fulham	2	Merton 2		Gan Width -	42%							
14	Harrow	1	Lewisham		Gap <u>w</u> idth	1270 V							
15	Havering	2	Lambeth 9		Λ								
17	Hounslow	1	Kingston 2										
18	Islington	4 0	Hounslow 1	0									
19	Kingston	2 _H	lighbury and 2										
20	Lambeth	9	Have										
21	Merton	2	3 Change	the Gan									
23	Newham	3 Hami	Ha table to ta										
24	Not Applicable	3	width to in	crease the									
25	Richmond	4	width of th	ie bars									
26	1. Click on the data	5	Cr										
28	series (in this	1	Camden 5										
29		1	Bromley 5										
30	instance the bars in	4	Brent 6										
32	the chart) to select		Barnet 📕 3										
33		Ó	0	0									





Make each data point a different colour







Creating an Excel Dashboard

18. Preparing your Workbook

Create worksheets in your workbook as follows:

- 1. Data
- 2. Analysis

You can create these as you begin to work on the data. Ideally create one worksheet for each pivot table.

3. Dashboard

	1		2			3
15 1	14 CEO	Citizens Advice Richmond	Yes	TW12 1NY Richmond	Frontline Open	Data Esser Hive
16 1	15 Your <mark>g</mark> Peo	Community Action Sutton	No	SM1 3AA Sutton	Infrastruct Open	Data Esser Hive
47	Dashboard	Borough - Pivot Knowled	dge - Pivot	Heard via - Pivot	Organisation - Pivo	t Data 🕂 :

19. Formatting your Dashboard

Add Title

Add a text box to add a title to your chart

Copy and paste charts in from other sheets, hold Alt key down when moving to snap charts to the gridlines

Hide Gridlines, Headers & the formula bar

AutoS	ave 이 🌒 🕞 🏷 🗸	⊇ → 🗢 Attendee data com	pleted- Creating a Dashboard	۹ - Saved 👂	Search	Alice Linell
File	Home Insert Pa	age Layout Formulas D	ata Review View	Help	On the view tab, check/u	incheck
		🗹 Ruler 🗹 Formula Bar		+	Sheet elements you wish	i to
Normal	Page Break Page Custom Preview Layout Views	🗌 Gridlines 🗹 Headings	Zoom 100% Zoom to Selection	Window All Par	show/hide	os
	Workbook Views	Show	Zoom		Window	Macros
8	Enfield	4				
10	Hackney	5				
11	Hammersmith & Fulham	2		20%	Frontline	Infrastructure
12	Harrow	1		3070		
13	Havering	2	6997		Training Locations	

20. Slicers

, F	AutoSave On • [문 년]	2 × <	y → →	1. Click or Insert tab	n the	e x A ^Q - Sav w View	ed 🔎 Help	2. Click Slicer	on			
Piv	PivotTable Recommended Tables			Get Add-ins My Add-ins ~ Add-ins	<mark>⊳</mark> ₩	Recommended Charts		Maps Pive	± DtChart ✓	utt 3D Map ∽ Tours	Line Line Column Loss Sparklines	Filters
	А		В	С		E	E G			н	1	L
1	Name 🔽	Prisor	n .	Date of birth	▼ Da	ate registered 🔽	Instrumer	nt experience	▼ Tot	al hours	Points per h	our 🔽
2	Wolfgang Puck	HMP	Pentonville	11/10/19	82	20/01/2002	Bass				1	1
3	Julie Walters	HMP I	Bronzefield	20/09/19	73	08/02/2012	Bass, guita	ir			9	2
4	Margaret Atwood	HMP I	Bronzefield	18/09/19	63	07/06/2015	Drums				8	2
5 Usain Bolt HMP Manchester			21/07/19	94	05/05/2014	Drums			3	4	3	



ļ	AutoSave 📀) • (° •	÷	Musi	c Mentors d	ata wit	th notes.xls	х А ^Q -	Savec	d F	Se
File Home Insert			Page L	ayout	Formulas Data			Review	v V	Help	Ta	
A1		• : ×	√ fx	Nan	ne							
		А	В			С			E			G
1	Name			_	Dat	e of birth	-	Date regi	stered	💌 lr	nstrumer	nt ex
2	Wolfg ³	. Select the f	ield you	ille		11/10/:	1982	2	0/01/2	002 B	ass	
3	Julie V W	ant to use a	s a filter	eld							s, guita	ar
4	Margaret	Atwood	HIVI		Insert Slice	rs		?	\times	ums		
5	Usain Bolt		HMP Man	chest		· · · · · · · · · · · · · · · · · · ·					Jms	
6	Alain Pros	t	HMP Man	chester		Name					itar	
7	Andre Aga	issi	HMP Swan	isea		✓ Prison					itar	
8	Harper Lee	e	HMP Bron	zefield		Date of	birth				itar	
9	Hone Heke	e	HMP Pento	onville		Age no	W				itar	
10	Jason Rob	inson	HMP Swan	isea		Date re	gistere	d			itar	
11	Lionel Ritc	hie	HMP Bristo	ol		Age at I	registra	ition			itar	
12	Lorna Will	iamson	HMP Holloway				ient exp	perience			itar	
13	Serena Wi	illiams	HMP Hollo	way			ours				itar	
14	John Stein	beck	HMP Pento	onville			per nou	11			itar, ba	SS
							JIIIUS					

Formatting a Slicer

When using a slicer it is a good idea to only include only filters for where data exists otherwise the filter will return no results.

6	ଜୁ ୩ · ୧ · ∓																										
File	ile Home Insert Page Layout Formulas Data Review View Help C										tions	₽ Tell	me what y	you wan	it to do												
Paste	🔏 Cut 🖻 Copy 🚿 Form	iat Painter	B I U	•	 ▲ ▲	 ↓	= =	≫ - €≣ ₹≣	환 Wrap T 臣 Merge	ext & Center	Gene	eral • % *	9 (←0)	Co For	rditional Fo matting * 1	ormat as Table *	Norm Calcul	al	Bad Check Cel	I	Good Expla	l inatory	Neu <u>Hyp</u> e	tral erlink	4 1	Insert	t De
	Clipboard	Fa		Font				Alignm	ent			Numb	ber						Styles								(
Status	tatus 👻 : 🗙 🗸 🏂																										
	A	В	C D		E	F	G	н	1	J	К		L	м	N	0	Р	Q	R	S		Т	U	V	w	x	
1											V	Who	's cor	ning	to our	r Data	I Ess	sentials	sessio	ns?			Borou	gh			
3	Su	Superhighways reach accross New to Superhighways?								Knowledge Lev				Level before the			councer customer to					Barn	et				
5				Nougho															1010			con		t		í E	
6											• A little				Unknown							Brom	nley		j -		
8									No 39%					kr	nowledge			Word of Mout	h				Came	den			
9			88%								38%		47%		000 KHOWICOgi	Heard	via? 🔻	Emai					City	of London			
11							Yes 61%							= N	o knowledge			Newsleue	er				Croy	don			
13	1										5%	10%		So Iar	ome nowledge			Twitte	e a				Enfie	g sld			
14		1	Ri	σht	click	r on		٥r)										0 10	20	30	40	-	0	~-		,
16		<u>т.</u>		SIL	Circi.	. 011		Ci														_	Status	ndad	\$=	*	
17 18 25		and	select	: the	e opt	lion	Slic	er					Sli	icer Sett	tings					?	×	(Canc	elled			
19 20		Settings. Then tick the box							_	Source Name: Status Name to use in formulas: Slicer_Status								No sl	how		íŦ						
21 20	Juide iterre with an date									Na	ame: Sta eader	atus								Atte	nding		~				
22 23		HIGE	tern	5 WI	tn ni	0 0	ata.							<u>D</u> ispla	ay header								6			O	
24 15	~								Croydo	n			Ite	m Cortin	a status												
26									■ Lambe	th			(Ascen 	iding (A to Z)			Hide item	s with no data								
27									South	vark			O Descending (Z to A			nding (Z to A)			ly indicate item ow items with	licate items with no data							
29 5	_	_		_	- 1		_		Tower	Hamlets				<u>v</u>] ose c	usto <u>m</u> tists wi	nen sonnig		Sh <u>o</u> w	items deleted f	from the da	ita sour	rce					
30 31																			ОК	(ancel						





Linking the slicer to your charts







Refreshing the Dashboard



