



Creating a Dashboard with Microsoft Excel

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BE MORE DATAWISE

#DatawiseLondon



Session agenda

Objective: All attendees to create a sample dashboard with a variety of different charts

- 10:00 Intros
- 10:10 Zoom controls & session guidelines
- 10:15 Short demos & exercises
- 11:20 Wrap up & questions



Introductions

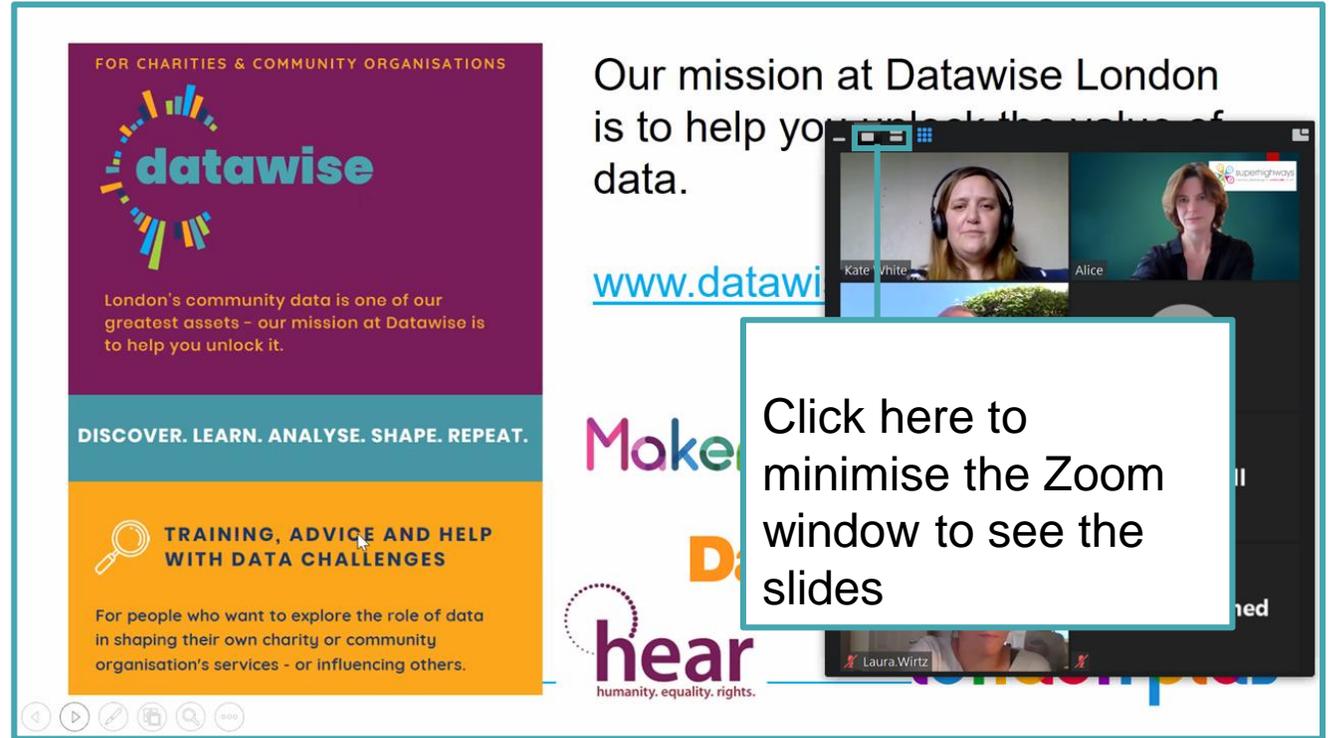
We're going to keep intros quick as this is a short session with lots to cover so please tell us:

- ✓ Your name & Organisation
- ✓ If you've seen a great dashboard somewhere



Zoom controls

- Space bar held down while you speak to temporarily unmute
- Alt+Tab or Command+Tab to toggle between Excel & Zoom



FOR CHARITIES & COMMUNITY ORGANISATIONS

datawise

London's community data is one of our greatest assets - our mission at Datawise is to help you unlock it.

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TRAINING, ADVICE AND HELP WITH DATA CHALLENGES

For people who want to explore the role of data in shaping their own charity or community organisation's services - or influencing others.

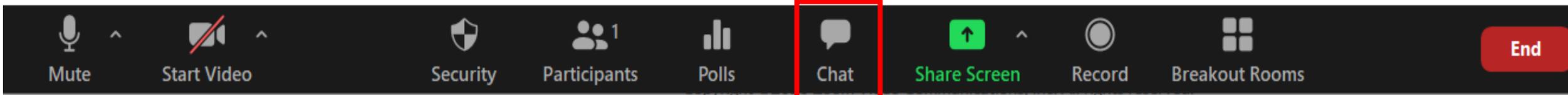
Our mission at Datawise London is to help you unlock the value of data.

www.datawise.org.uk

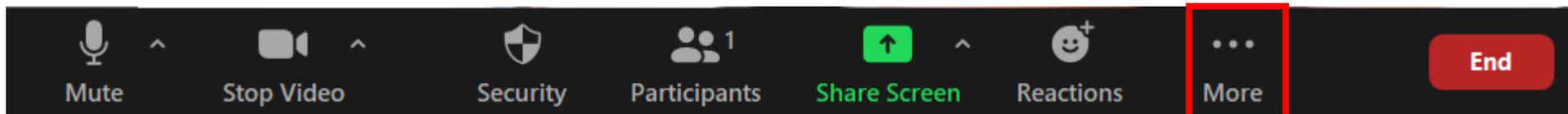
Click here to minimise the Zoom window to see the slides

Kate White Alice Laura Wirtz

Make D hear humanity. equality. rights.



Mute Start Video Security Participants Polls **Chat** Share Screen Record Breakout Rooms End



Mute Stop Video Security Participants Share Screen Reactions **More** End



How we'll run the training:

- ✓ Session will be divided up into a short topic demo & then the opportunity for you to put it into practice.
- ✓ Questions – ask questions either in chat function or out loud at the end of a topic before we do the exercise
- ✓ Step by step guidelines have been emailed to you – use them if you get stuck
- ✓ Please keep your camera & microphone on unless you have a noisy background
- ✓ After each exercise I'll check in with you to see if you've managed it ok.



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COALITION
— FOR EFFICIENCY —

Makerble



london plus

DataKindUK



What we'll cover today...

- ✓ What is a dashboard
- ✓ Creating pivot tables
- ✓ Creating charts
- ✓ Adding sliders
- ✓ Formatting your dashboard

Make sure you have your Excel file downloaded!



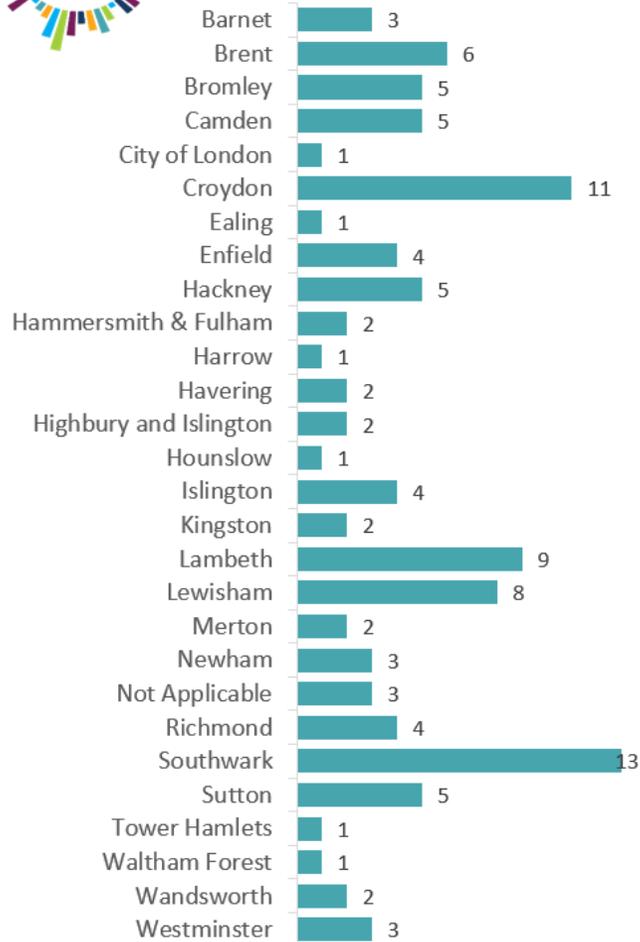
Topic 1: What is a Dashboard

- ✓ A Dashboard is a type of graphical user interface which provides at-a-glance views of key performance indicators relevant to a particular objective or business process.
- ✓ Another way to describe it might be as a visual progress report
- ✓ Or even more simply, in the case of Excel, a collection of charts on a worksheet



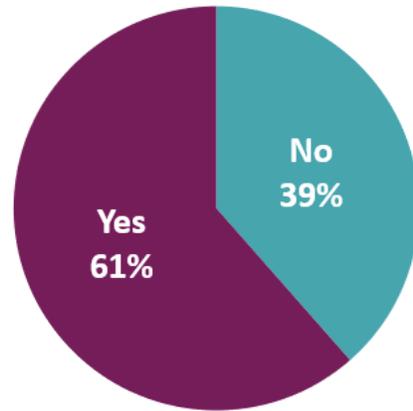


Data Essentials

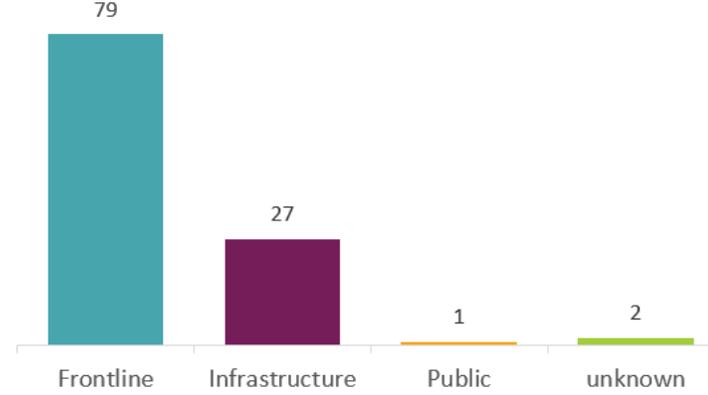


Attended **81** 74%
No show **28** 26%

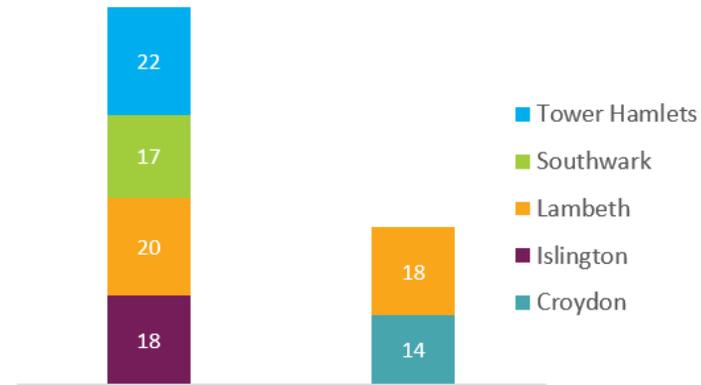
New to Superhighways?



Type of Organisation



Training Locations



Borough [Menu Icon] [Filter Icon]

- Barnet
- Brent
- Bromley
- Camden
- City of London
- Croydon
- Ealing
- Enfield
- Hackney
- Hammersmith &...
- Harrow
- Havering
- Highbury and Isi...
- Hounslow
- Islington
- Kingston
- Lambeth
- Lewisham



Data Essentials Dashboard

- ✓ The dashboard we're going to be creating today is using a portion of data from our data essentials course. The data is real but anonymised.
- ✓ The data essentials course is a free course we run as part of the Datawise London project. The course is run all over London. The aim of the course is to get people interested in data & thinking about how to use it to improve service delivery and demonstrate impact.
- ✓ The dashboard we are creating today is to show who is coming to our courses – How big is our reach? What sort of organisations are they? Where are they based? Which session venues are they coming to? And, are they showing up?

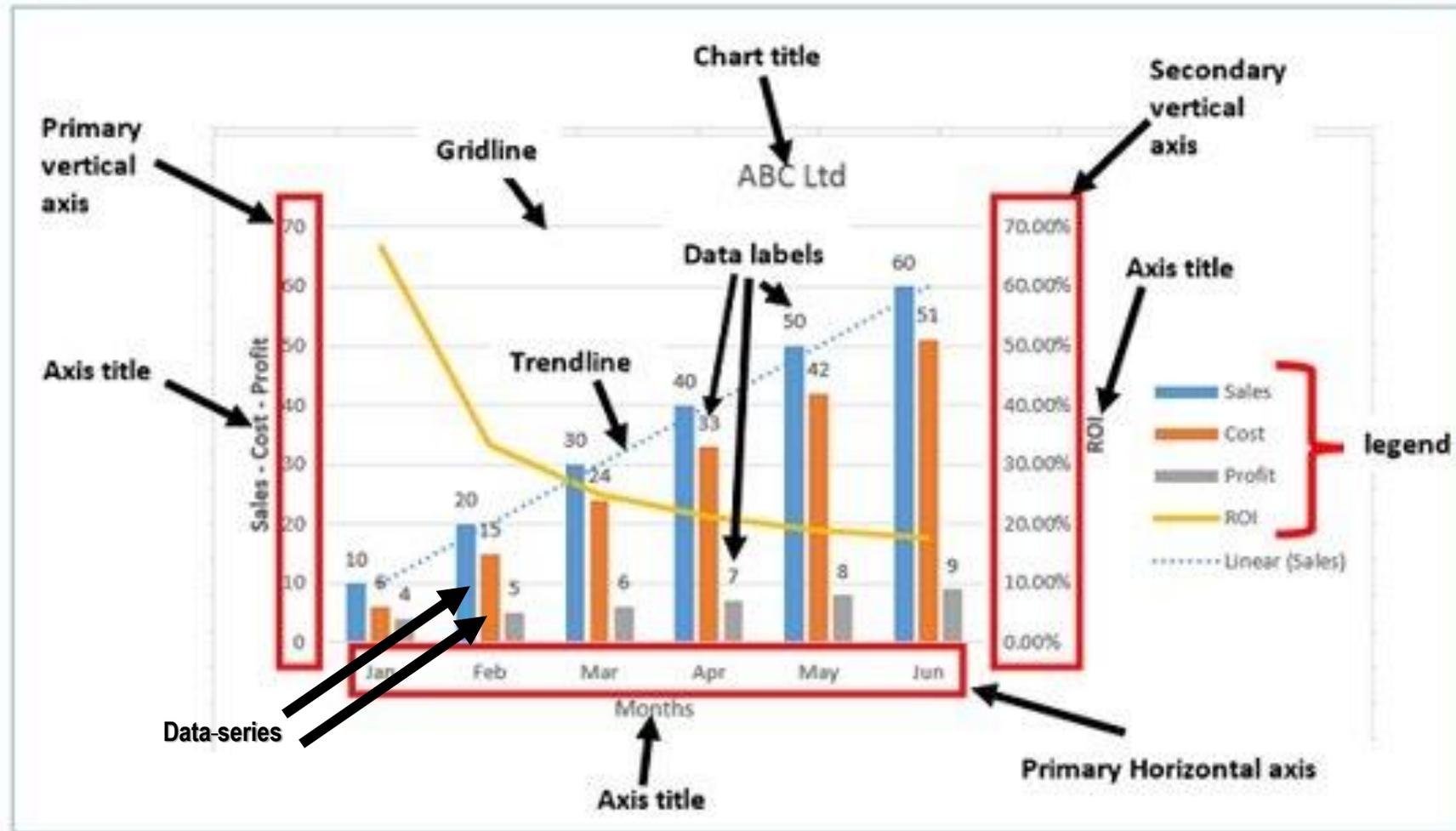


Topic 2: Getting the workbook ready to go

- ✓ Rename sheet 1 to “Data”
- ✓ Make the source data into a table & name it



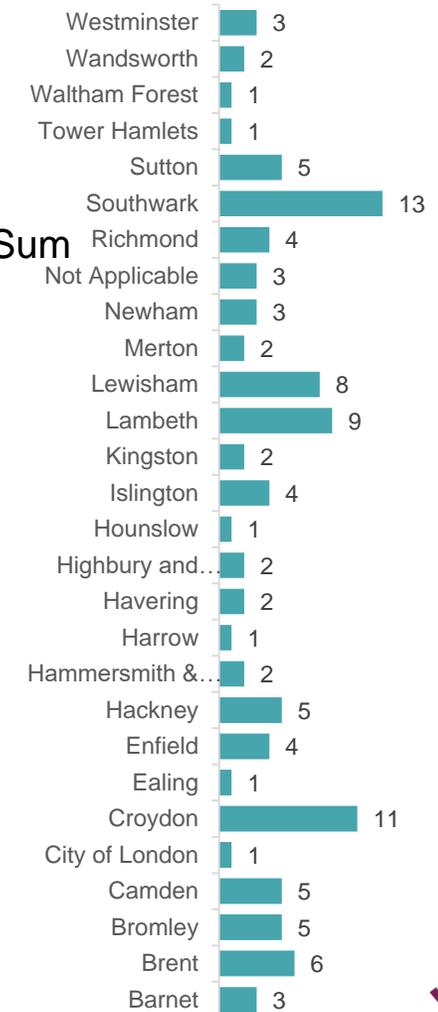
Anatomy of a chart



Exercise 3:1 Borough bar chart

- Insert Pivot chart & table (Insert tab- Pivot chart & table)
- Rename Sheet tab to Boroughs
- In the pivot table select: Axis=borough, values=customer ID.
- In the Customer ID in values, change the value field settings, change customer ID to Count not Sum
- Rename the pivot table to "Borough"
- Change the sort order on the pivot table to Z-A
- Change chart to bar (Chart design – change chart type)
- Resize chart
- Remove All field buttons (right mouse click on one)
- Remove Title (click on it and press delete on the keyboard)
- Add data labels (Click on the + to access the chart elements & deselect)
- Remove gridlines (Chart Elements - deselect)
- Remove Legend (Chart Elements - deselect)
- Remove horizontal axis (Chart Elements – deselect)
- Reduce gap width so that the rows are fatter (Select data series-Format tab-Format selection)

Time for completion: 6 minutes

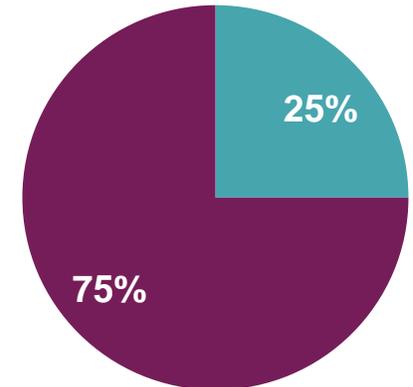


Exercise 3:2 New to Superhighways pie chart

- ✓ Insert Pivot chart & Table
- ✓ Add New to Superhighways to Row & Customer number to Values
- ✓ Change Customer number from Sum to Count
- ✓ Change chart type to Pie (Chart design tab- Change chart type)
- ✓ Hide the value field buttons on the chart
- ✓ Change chart title to "New to Superhighways?"
- ✓ Change data labels (+ Chart Elements - Data labels - More options...Label options)
- ✓ Change label from Value to Percentage & add category
- ✓ Remove legend (+Chart elements - uncheck Legend)
- ✓ Change label text colour to white, make it bold & increase point (Home tab)
- ✓ Rename Tab "New to Superhighways"

Completion time: 5 mins

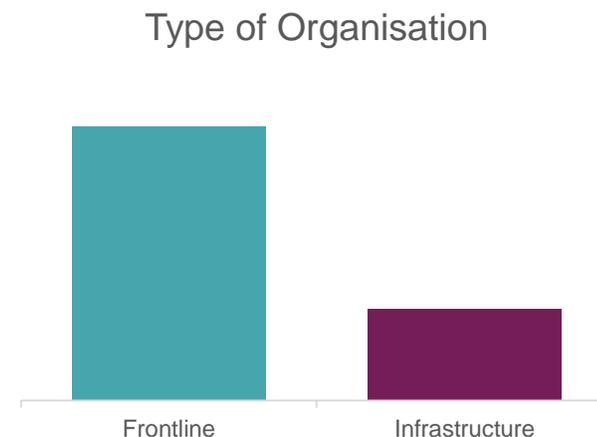
New to Superhighways?



Exercise 3:3 Organisation Type

- ✓ Insert Pivot chart & Table
- ✓ Add Organisation Type to Row/Axis & Customer number to Values
- ✓ In Values, change Customer number from Sum to Count (Click on arrow next to the chart value to select a different field type)
- ✓ Use Row Labels filter to remove blanks
- ✓ Select data series, click on Fill & Line button, check Vary colours by point
- ✓ Remove Legend, Gridlines & Vertical Axis (+Chart elements)
- ✓ Hide All field buttons (Right mouse click on one)
- ✓ Increase width of columns (Select data series & decrease gap width)
- ✓ Change title to "Type of Organisation"
- ✓ Rename Tab to "Type of Organisation"

Completion time: 5 mins



Exercise 3:4 Attendance numbers

- ✓ Insert Pivot table (not a chart)
- ✓ Rows=status , values=customer ID x 2 , change customer ID to Count
- ✓ Summarise values by: Change Status 1 value to Count
- ✓ Change Customer ID 2 value to %
- ✓ Rename Pivot “Attendance”
- ✓ Rename sheet “Attendance”

Attendance

81

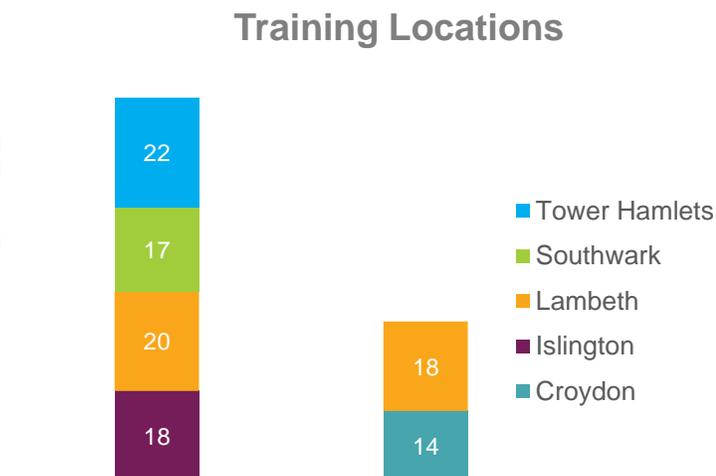
74%

Completion time: 5 mins



Exercise 3:5 Training Location

- ✓ Insert pivot table & chart
- ✓ Rows/Axis - Years, Values = Count of Customer ID, Column = Training Location
- ✓ Change chart type to Stacked column (Pivot Design tab)
- ✓ Hide All field buttons (Select data series & right mouse click)
- ✓ Remove Gridlines & Primary vertical axis (+Chart Elements)
- ✓ Add data labels (+ Chart Elements)
- ✓ Change title to "Training Locations"
- ✓ Rename pivot & sheet to "Training Location"



Completion time: 5 mins



Exercise 4: Putting it all together

- Create & name a tab for the dashboard
- Copy & paste all the charts into the dashboard
- Add a slicer and connect it to the pivot tables
- Use the Get pivot data formula to add in Attendance & No show numbers
- Amend Get pivot data to allow for 0 values without returning an error (see Useful bits sheet)

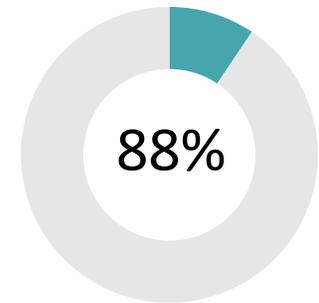
Completion time: 6 mins



Extension Exercise - Reach

- ✓ Go to borough sheet
- ✓ Enter Total London boroughs = 32
- ✓ Boroughs covered. Use formula = CountA(A4:A31)
- ✓ Add Boroughs not covered = London boroughs-boroughs covered
- ✓ % Reach = 28/32 and change field type to %
- ✓ Select boroughs covered & not covered + numbers and add a donut chart
- ✓ Select the data series to decrease the donut hole size
- ✓ Add a box into the middle, white fill & no outline, and then put % field in

Superhighways reach across London boroughs



Dashboard best practice

- ✓ Decide what you want to say to your audience and make sure that all everything on the dashboard is telling that story
- ✓ Don't over complicate – it's better to have a clean, simple dashboard than one brimming with so many charts it's impossible to take it all in.
- ✓ Keep colour schemes consistent and simple
- ✓ Think about how your audience is going to be viewing it – on a PC/laptop or on a mobile device
- ✓ Security – Excel dashboards sit in spreadsheets full of data. Make sure you think about who is going to have access and how much data they can have access to.
- ✓ Printing - make sure it fits on one page



Questions to ask before you begin

- ✓ **Why are you creating this dashboard?** Are you trying to prove or disprove a hypothesis? Is this dashboard for a specific task, like showing status of a project, or does it need to achieve a broader goal, like measuring business performance? Understanding why you are building the dashboard will help guide the design and data.
- ✓ **Do you need to track certain KPIs?** Your dashboard should only highlight data that adds value. Make sure you understand the most important KPIs and create the dashboard around those metrics. Anything outside those main KPIs aren't necessary.
- ✓ **Who needs to see the dashboard?** Is this for your colleagues, your management team, your board of trustees? How do these people prefer to digest information? How much time do they have to look at this dashboard? Think about who you're making the dashboard for and keep their preferences in mind.
- ✓ **Where will the data come from?** Do you need to manually import data into your dashboard or will you use an integration or connector to automatically sync and refresh data? What other tools do you use to gather data?
- ✓ **How up to date does the dashboard need to be?** Can you update your dashboard weekly or monthly, or does it always need to show real-time, updated information? Depending on what you chose, this will change the way you build your dashboard.
- ✓ **What format does the dashboard need to be in?** Are you emailing a static dashboard or providing a link to a dynamic one? Does the dashboard need to be embedded in presentations or decks? Do you want to share read-only access or do you want to provide editing capabilities to certain people?



Next steps...

- ✓ Don't worry if you don't remember everything you've learnt today or if you didn't manage to complete all the exercises – what's important is that you know what's possible.
- ✓ Use the word document to help guide you through the process of setting up your dashboard.
- ✓ Complete the post session survey to receive more Excel training materials & to help us improve the session for other charities like you.
- ✓ Visit the Superhighways website for more training offers & sign up to our newsletter to be notified when new training sessions get posted
- ✓ Get in touch if you get stuck with Excel and need a hand – we're always happy to help.
- ✓ Send us a screen print/pdf of your dashboard – we love to see what our courses have helped you achieve & they can be a great learning tool for us and, if we have your permission, for other charities.

