Data Essentials

DISCOVER. LEARN. ANALYSE. SHAPE. REPEAT

BE MORE DATAWISE

#DatawiseLondon

Datawise London

Improving use of data by small local charities and community organisations, leading to better shaping of services to meet the needs of Londoners

http://bit.ly/datawiselondon

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

New partnership programme
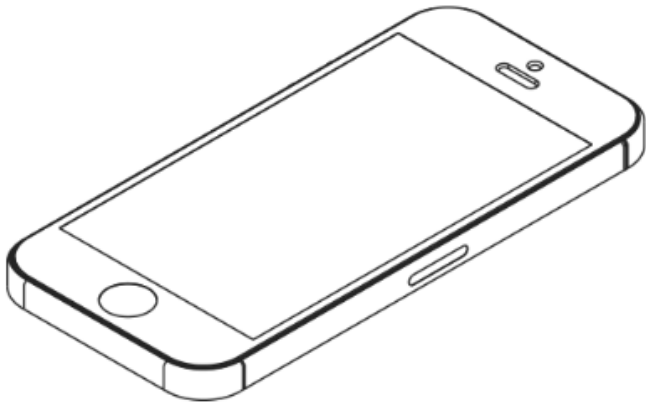
What we'll cover today…

- What data are you collecting?

- What's it useful for?

- How are you analysing it?

- Some Data best practice

- What external data might be helpful?

- What digital tools can you use?

- How Data Mature is your organisation?
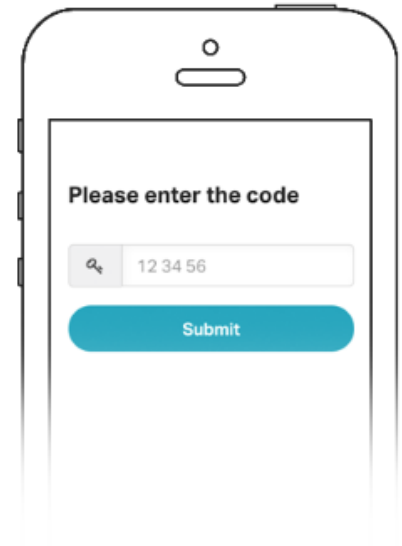
Go to **www.menti.com** and use the code **47 47 40**

www.menti.com

Please enter the code

12 34 56

Submit

1

Grab your phone

2

Go to www.menti.com

3

Enter the code **47 47 40** and vote!

What's the first word that springs to mind when you think of data?

numbers

fun

complexity

research

power

information

entry

9

What would you say are your biggest challenges with data?

data analysing

collecting data

presenting data

make sense of it

training

software training

processes

presenting

software collection collecting analyse it

accuracy

pracrice

collect it

using it

unclean data

time keeping it up to date

lack of data culture

9
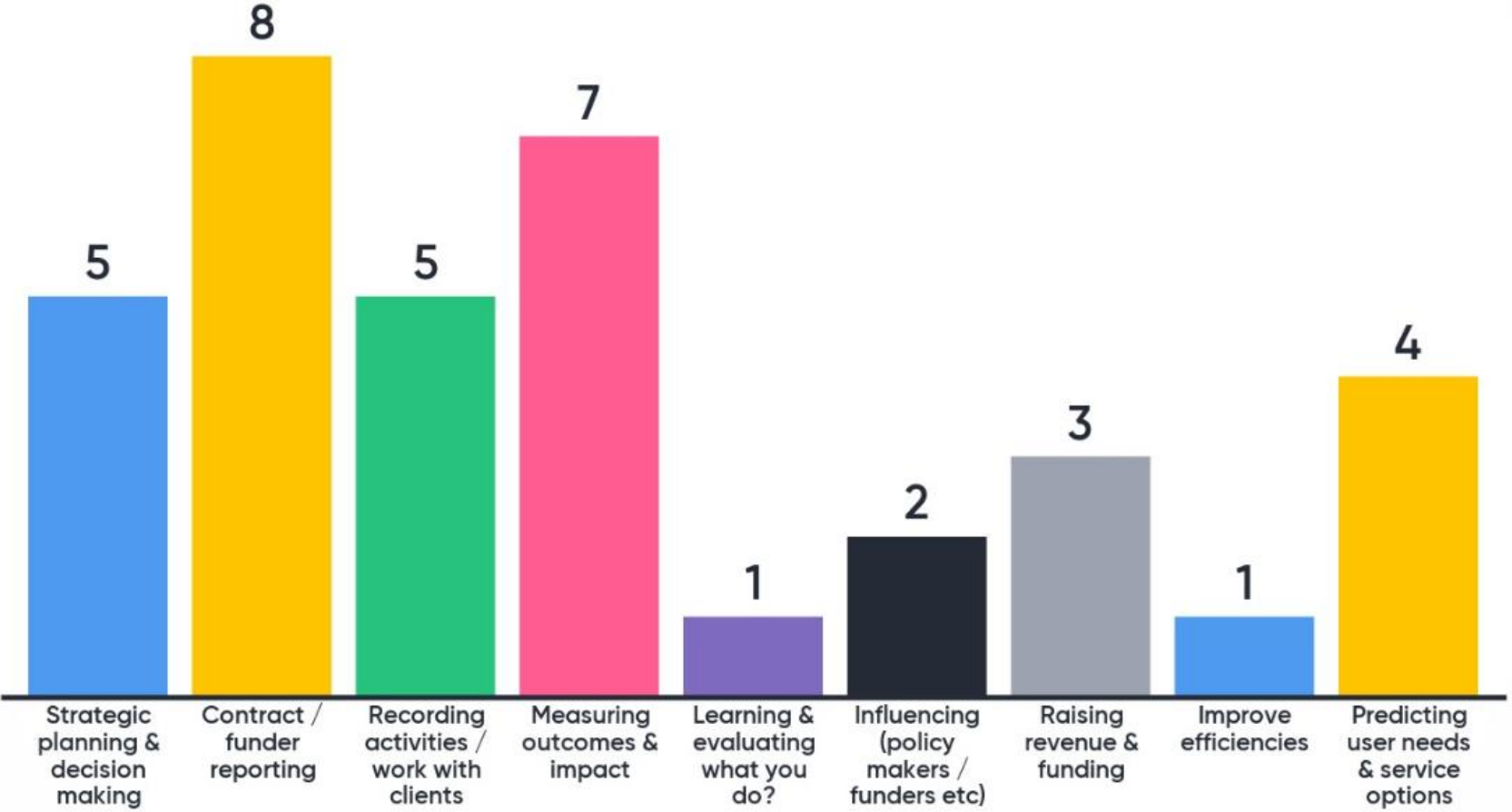
Data collection

What data do you collect?

Data Essentials example:

Organisation
Name
Role
Geography (post code or borough)
Knowledge level
How did you find out?

What is data?
Data challenges
Data use benchmark
Data maturity

Feedback
- Satisfaction / quality
- Usefulness
- Next steps
- Support needs

On booking – via Eventbrite

In session – via Mentimeter / post its

Post session – via Survey Monkey / phone call

Types of data

User data	Engagement data
Asks: demographics, characteristics, reason for coming service	**Asks:** how people engage, frequency, why they stop
Establishes: your target audience, who you are serving	**Establishes:** the extent to which people use your services and how

Service data	Outcome data
Asks: what they liked / didn't like, why, what they would change, what is special	**Asks:** what has changed as a result of using the service, what have people gained
Establishes: whether users are satisfied and your service is working as intended	**Establishes:** short-term and long term impact on people's lives

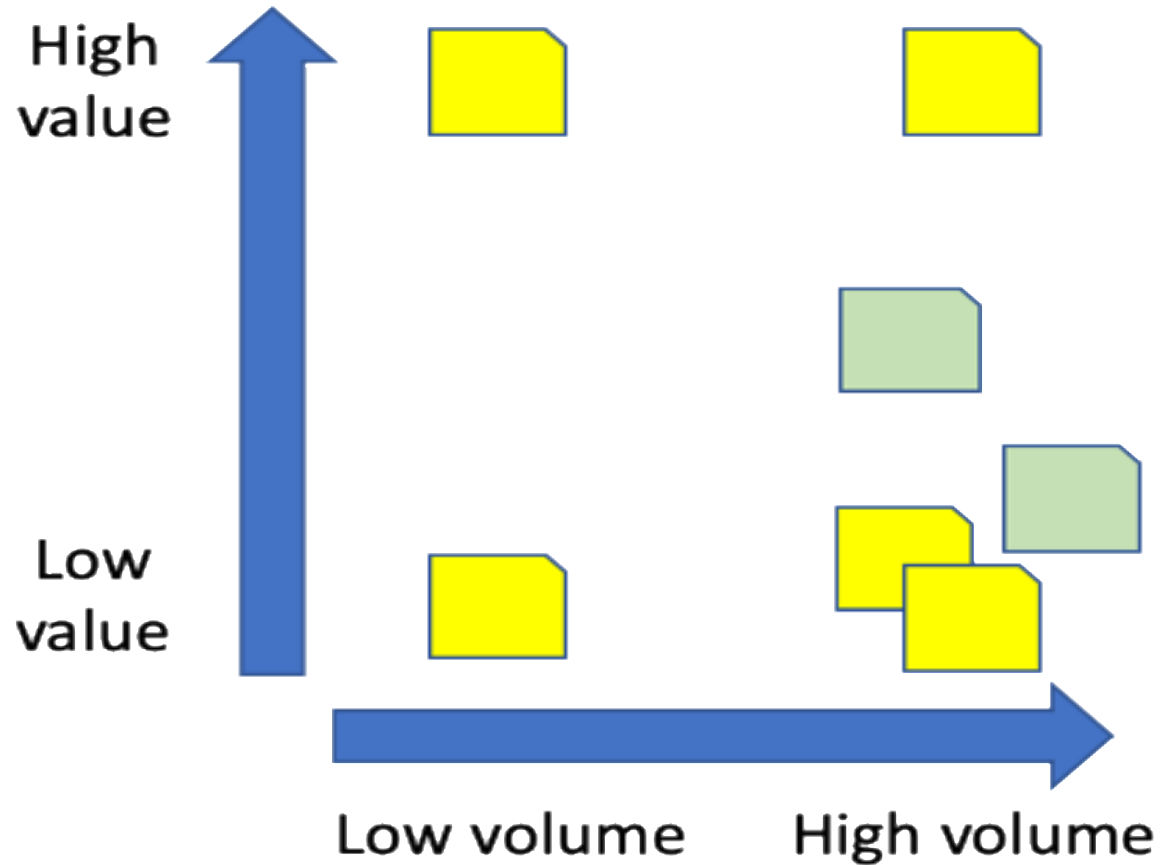# What data does your organisation collect?

| Data you collect / generate internally | Data generated externally to your organisation | What's missing – is there data you need but don't have? |

How do you use it - let's get sorting...

High value

Low value

Low volume   High volume

- Improving service delivery

- Influencing funders

- Communicating with the public

Using your data

What would Alice do??

✓ Split your table into two groups

✓ Complete the worksheet
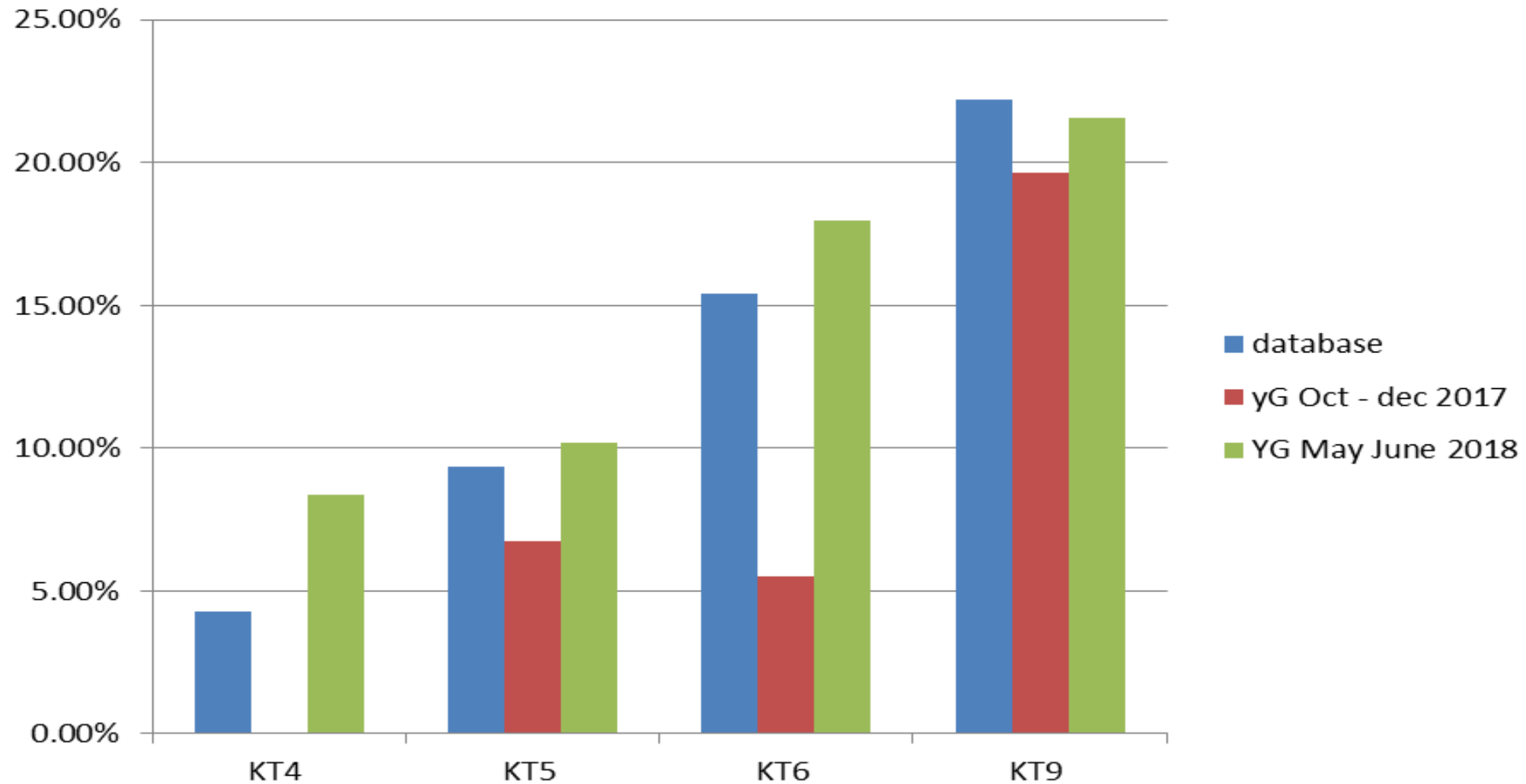
✓ Feedback

✓ See what actually happened!

Part 1 – click below

Part 2 – click below

12+ Youth group Attendance before and after transport grant and introduction of minibus service

Excel for Monitoring & Evaluation

Mon 16th Dec, 10 – 1.15

✓ Manage, filter, sort and view spreadsheets of multiple records

✓ Apply formula and use various functions to support monitoring & evaluation
  - ✓ CountIf
  - ✓ Conditional formatting
  - ✓ Pivot tables

✓ Link worksheets & create a summary sheets

✓ Present your data in charts and graphs and use simple mapping applications (for postcode data)

Find out more and book here

Kensington & Chelsea Social Council

Break
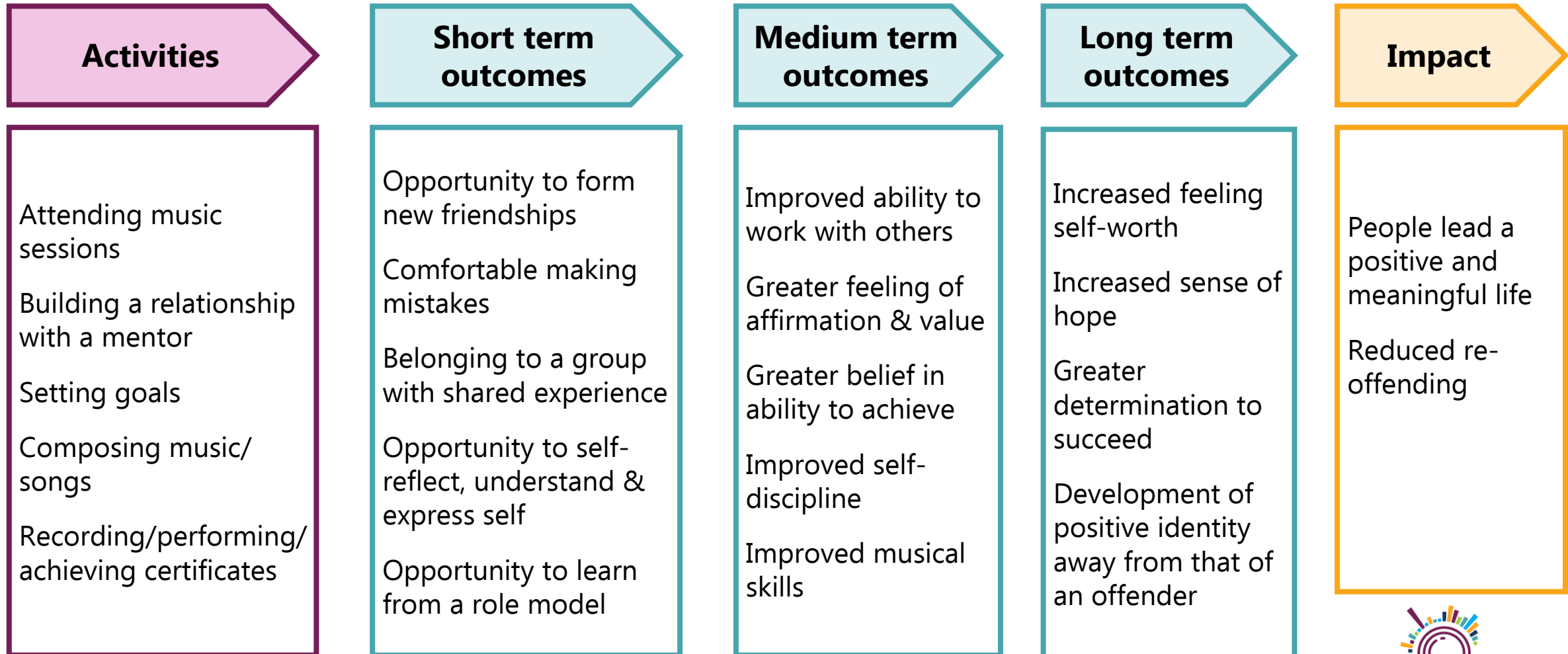
Data Best Practice

LETS WORK THROUGH AN EXAMPLE…

Music Mentors

✓ Music Mentors work with young offenders in prisons. Young people sign up to take part in group sessions where they work together with other offenders and mentors to write, play and record music.

✓ The ethos of the sessions is that it is a non-judgemental space where people with varying degrees of musical skill are free to explore ideas. Through music they build relationships with mentors, explore their feelings and experiences, learn that it's ok to make mistakes and grow confidence in their ability to achieve.

✓ Extended participation in the sessions sees people making progress on goals, working well with one another, receiving positive reinforcement from mentors and starting to believe in their abilities.

✓ The longer term impact on people is an improved sense of self-worth, more determination to succeed as a result of achieving small successes, increased hope for the future and development of an identity away from that of an offender.

Logic model / theory of change

Activities	Short term outcomes	Medium term outcomes	Long term outcomes	Impact
Attending music sessions Building a relationship with a mentor Setting goals Composing music/ songs Recording/performing/ achieving certificates	Opportunity to form new friendships Comfortable making mistakes Belonging to a group with shared experience Opportunity to self-reflect, understand & express self Opportunity to learn from a role model	Improved ability to work with others Greater feeling of affirmation & value Greater belief in ability to achieve Improved self-discipline Improved musical skills	Increased feeling self-worth Increased sense of hope Greater determination to succeed Development of positive identity away from that of an offender	People lead a positive and meaningful life Reduced re-offending

What would you want to know?

User data
Length of sentence
Prison behaviour record
Ethnicity
Age

Engagement data
How many sessions were run?
How many attended each session?
How many were new / repeat attendees?
How many musicians attended each session?

Service data
What instruments were available?
What was good about the session?
What could be improved?
How easily could people access the session?

Outcome data
Did people start working better together?
Did it give space to explore issues/ideas?
How did behaviour change over the sessions?
Did people build a relationship with a mentor?
Has attitude changed towards self/future?

Music Mentors' Data

Jan 2017 – Dec 2018	
Total sessions	12
Total participants	60
Total repeat participants	40
Total musicians present at sessions	18
No. participants with experience of playing instruments	Drum=40 Guitar=40 Piano=20 Bass=0
Baseline: "I am optimistic about my future" (No. people who agree)	10
End: "I am optimistic about my future" (No. people who agree)	30

Over to you

On average, how many participants attended each session?	
What percentage of participants were repeat participants?	
What was the average ratio of musicians to participants at each session?	
What proportion of participants had experience of playing piano?	
What percentage of people felt optimistic at the start?	
What percentage of people felt optimistic at the end?	
Using the data, write a sentence that describes the change in optimism:	

Answers

On average, how many participants attended each session?	5
What percentage of participants were repeat participants?	Two thirds (67%)
What was the average ratio of musicians to participants at each session?	1 or 2:5
What proportion of participants had experience of playing piano?	A third (33%)
What percentage of people felt optimistic at the start?	A quarter (25%)
What percentage of people felt optimistic at the end?	Three quarters (75%)
Using the data, write a sentence that describes the change in optimism:	

- Of the 40 repeat participants, only one in four (10 people) felt optimistic about the future at the start. By the end of the programme, three in four (30 people) felt optimistic.

- The number of participants feeling optimistic about their future tripled.

- The proportion of people feeling optimistic increased from 25% to 75%

- The proportion of people feeling optimistic increased by 50 <u>percentage points.</u>

- There was a 200 <u>percent increase </u>in people feeling optimistic.

Tips

✓Avoid average numbers that don't make sense in the context.
  ✓E.g. one or two musicians were present, not 1.5 musicians

✓If your sample size is less than 50, use numbers instead of percentages
  ✓Percentages on small sample sizes can be misleading

✓Be careful how you report percentages
  ✓E.g. percentage increase, percentage points, increase in level of optimism or number of people?

✓Use the correct base figure
  ✓E.g. only those with start and end data. Can people select more than one answer?

✓Investigate unused data
  ✓E.g. are there similarities in the drop-out group? Why do people skip a question?

✓Be mindful of factors that can skew your data
  ✓Can you generalise? Is it representative? Response rate? External factors? Timing? Halo effect?

Using data to make informed decisions

	What is it telling you?	Why does it matter?	What more do you want to know?
The retention rate			
The ratio of participants to musicians			
Participants' previous experience of instruments			
The change in optimism			

|	**What is it telling you?**	**Why does it matter?**	**What more do you want to know?**
The retention rate	It looks ok but how do we know? Compare to other retention rates of prison programmes?	According to the logic model, change occurs slowly over time. We need as many people as possible to return.	Why do people drop out? Can we ask them? Segment and analyse data: e.g. what impacts the return rate? Sentence / transfers / demographics / number of musicians present?
The ratio of participants to musicians	Have we analysed or researched the optimum ratio for forming relationships?	The relationship with the musician is key in changing behaviour. Numbers present and turnover of musicians impacts success.	Does the musician have time with the current ratio to form relationships? Can we ask them? Are there favourite musicians amongst the participants? If so, what are the characteristics that make them successful.
Participants' previous experience of instruments	Some participants have experience of a few key instruments.	The opportunity to express themselves is important (familiar instruments). Equally important is learning from mistakes (unfamiliar instruments).	Do we have the right mix of instruments in good condition? Can we tailor the groups to increase retention? How can we test our theory about the importance of different instruments?
The change in optimism	Very few participants enter the programme feeling optimistic. More participants leave feeling optimistic	Hope for the future is correlated with a reduction in reoffending – the intended impact of the programme.	Are there common factors for the people not reporting an increase in optimism (user / engagement data)? Would the project still be successful if more people started out feeling optimistic? If not, how do we reach the right people?

Using external data

Refugee & migrant advice service

- ✓ 'RMAS' provides information and advice by appointment at their office

- ✓ They run a drop in service at a central church location

- ✓ Are they reaching the clients most in need?

- ✓ Cross referencing Indices of Multiple Deprivation with client addresses

- ✓ Could this give some insight re where to provide an outreach service

Indices of deprivation by Ward
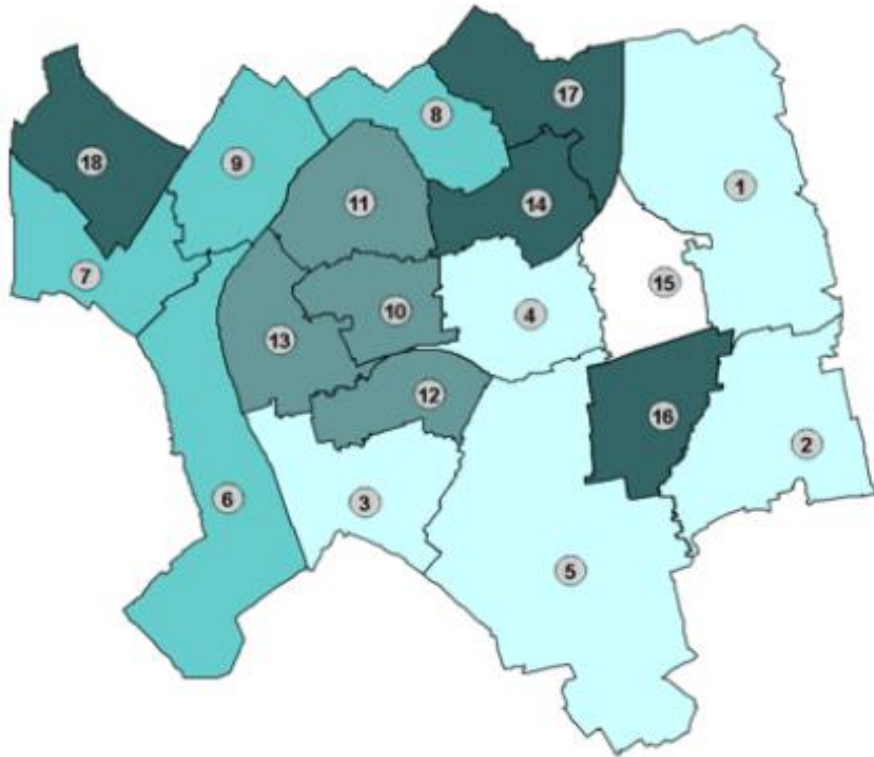
Darker shades represent higher levels of deprivation

Low (>=)	(<) High	Occurrences	
100	121	(5)	
121	143	(4)	
143	164	(4)	
164	185	(4)	

WARD KEY

1 Beddington North
2 Beddington South
3 Belmont
4 Carshalton Central
5 Carshalton South and Clockhouse
6 Cheam
7 Nonsuch
8 St. Helier
9 Stonecot
10 Sutton Central
11 Sutton North
12 Sutton South
13 Sutton West
14 The Wrythe
15 Wallington North
16 Wallington South
17 Wandle Valley
18 Worcester Park

What are the steps to adding client data?

Indices of deprivation by Ward
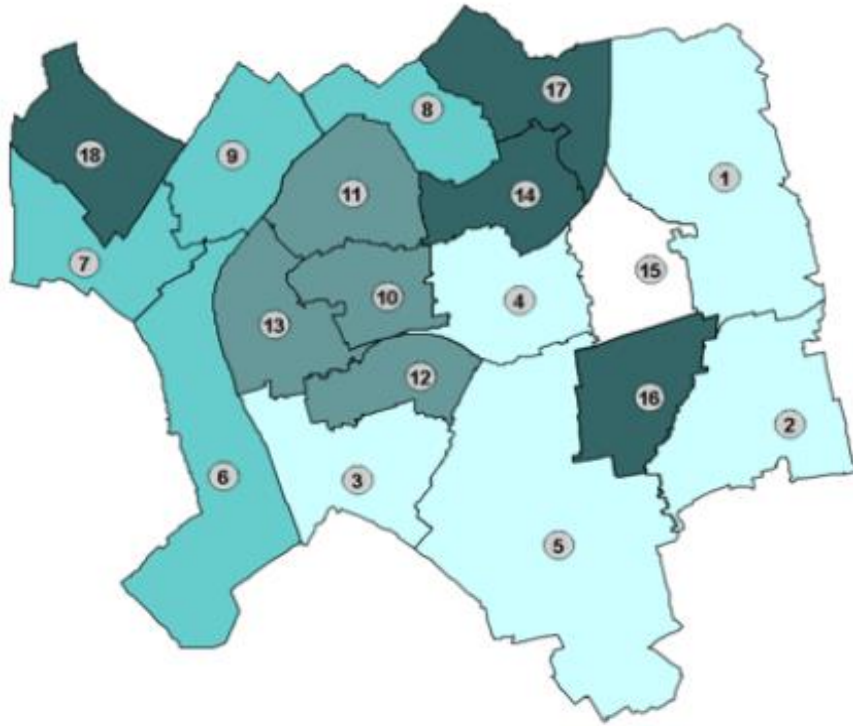
Darker shades represent higher levels of deprivation

Low (>=)	(<) High	Occurrences	
100	121	(5)	
121	143	(4)	
143	164	(4)	
164	185	(4)	

clients by Ward
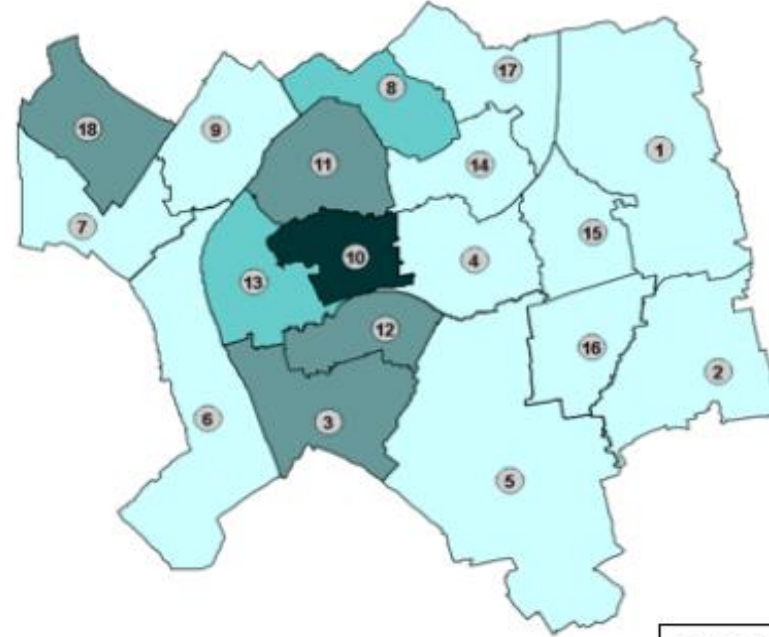
Darker shades represent higher numbers of clients

Low (>=)	(<) High	Occurrences	
1	5	(11)	
6	10	(4)	
11	15	(2)	
16	20	(1)	
21	25		

WARD KEY

1 Beddington North
2 Beddington South
3 Belmont
4 Carshalton Central
5 Carshalton South and Clockhouse
6 Cheam
7 Nonsuch
8 St. Helier
9 Stonecot
10 Sutton Central
11 Sutton North
12 Sutton South
13 Sutton West
14 The Wrythe
15 Wallington North
16 Wallington South
17 Wandle Valley
18 Worcester Park

How could you refine this further?

Simplest map creation…

batchgeo

Paste data sets with postcodes & create a map!

✓Blue existing volunteers

✓Red new client referrals

How can the map help you?

Kensington & Chelsea data

✓ London Data Store [K&C borough profile](#)

✓ Borough / ward [Excel mapping templates](#)

✓ Multiple Indices of Deprivation – average improvement from 2015 to 2019 (ranked 97 out of 317 local authorities increasing to 122)

✓ But not the whole picture - an LSOA area within Nottingdale Ward moved from the top 30% deprived LSOAs to within the top 20%

✓ There is also a marked average increase in Barriers to Housing and Services

✓ Source: https://dclgapps.communities.gov.uk/imd/iod_index.html#
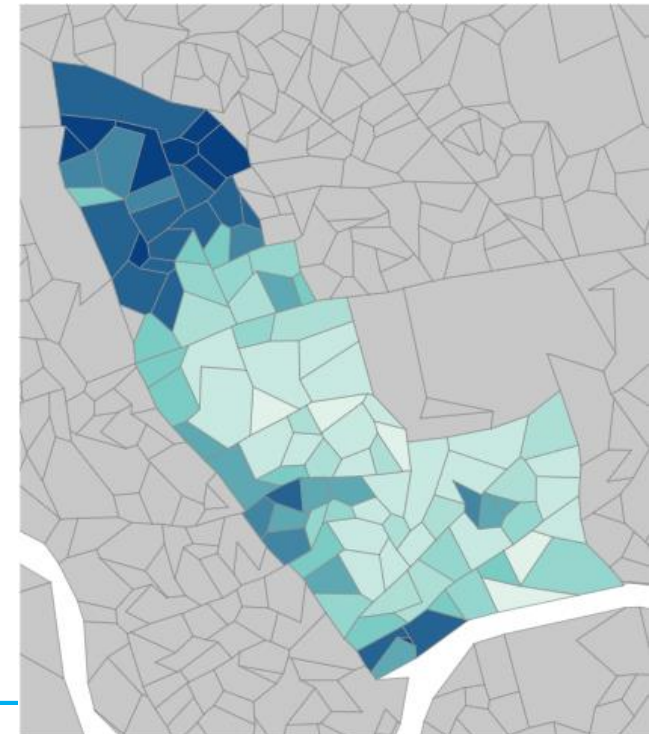
Creating Easy Infographics

Mon 16th Dec, 2 – 4.30

- ✓ Identify free and low cost digital data visualisation tools

- ✓ Choose the right visuals for your monitoring information

- ✓ Create infographics using free online tools

- ✓ Download your creations for use in reports, on websites and more
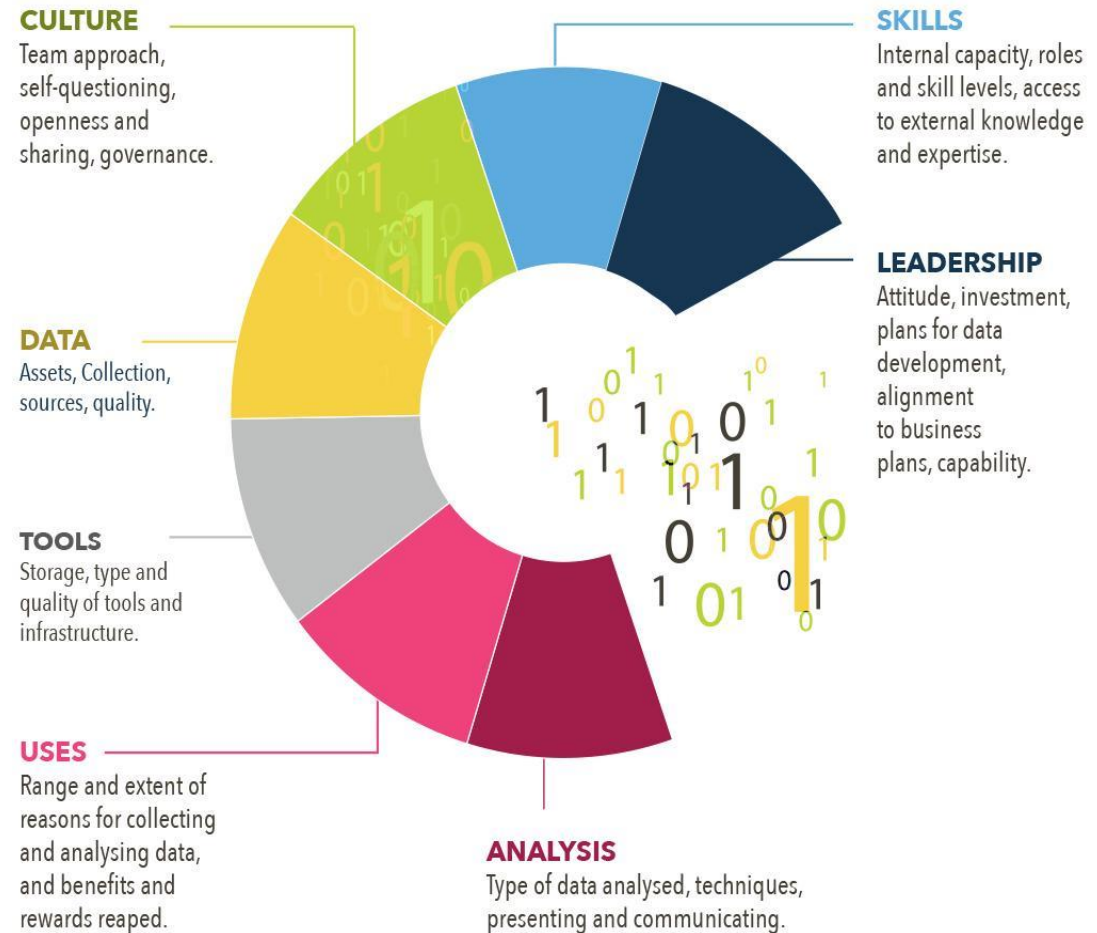
Find out more and book here

Kensington
& Chelsea
Social Council

Data Maturity

3 ASSESSMENT TOOLS…

How data mature is your org?

The Themes of Data Maturity

Developed by: DataKind UK & Data Orchard

http://dataevolution.org.uk/the-framework/

CULTURE
Team approach, self-questioning, openness and sharing, governance.

SKILLS
Internal capacity, roles and skill levels, access to external knowledge and expertise.

LEADERSHIP
Attitude, investment, plans for data development, alignment to business plans, capability.

DATA
Assets, Collection, sources, quality.

TOOLS
Storage, type and quality of tools and infrastructure.

USES
Range and extent of reasons for collecting and analysing data, and benefits and rewards reaped.

ANALYSIS
Type of data analysed, techniques, presenting and communicating.

How data savvy is your organisation?

Try one of our free self-assessment tools to find out

20 minute self-assessment

I only have 5 minutes

https://www.dataorchard.org.uk/data-maturity-assessment-tool/

Section 1: Uses

This section is about the purposes for which your organisation uses data. As far as possible respondents are encouraged to think 'whole organisation wide'.

To what extent does your organisation use data for the following service-related purposes? Note: The term 'clients' is used as an overarching term for beneficiaries/customers/service users.
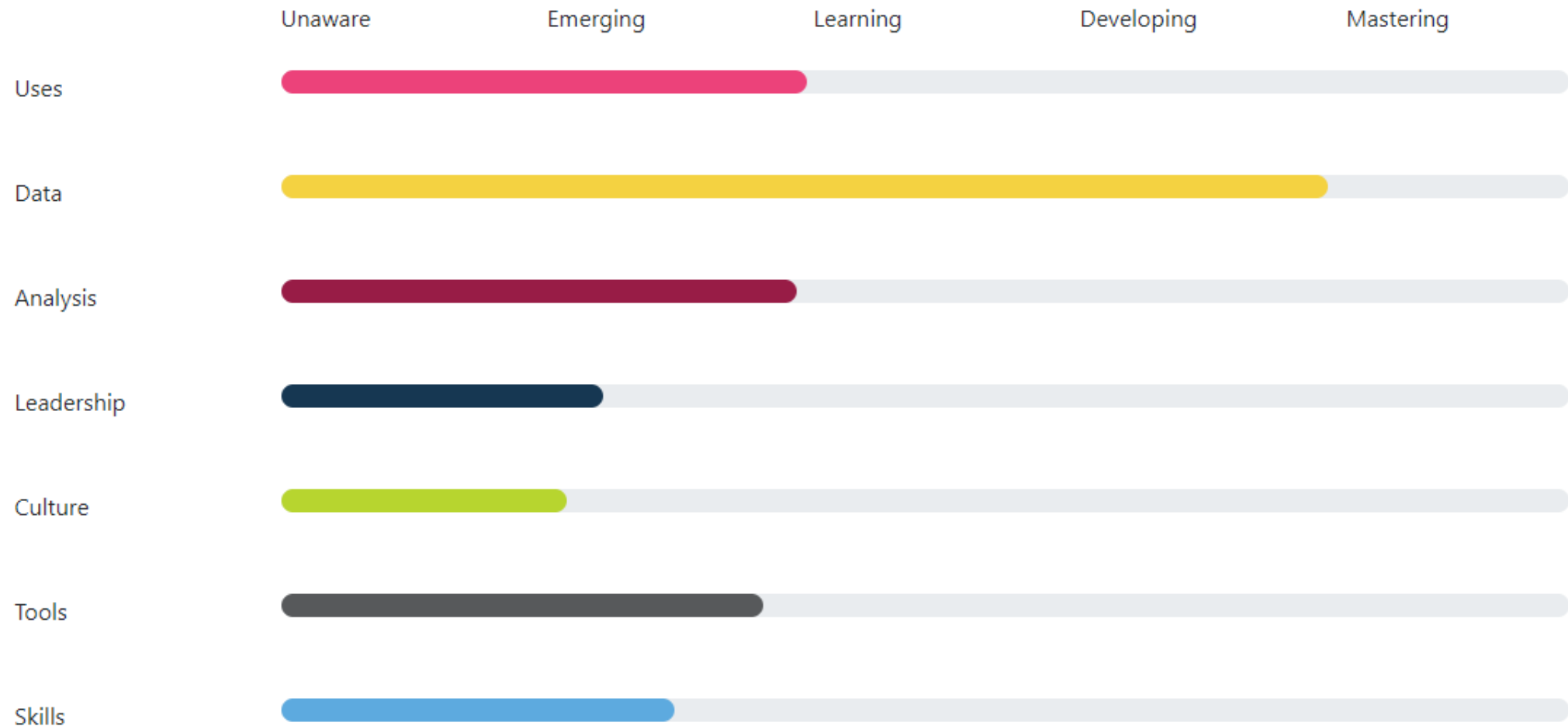
	extensively	moderately	a little	not at all	don't know/not applicable
Recording activity/work with clients	○	○	○	○	○
Measuring service quality and performance	○	○	○	○	○
Measuring the difference you make e.g. outcomes, impact evaluation	○	○	○	○	○
Evidencing the needs/problems you seek to address	○	○	○	○	○
Understanding the types of clients/environment you serve (e.g. profiles, characteristics)	○	○	○	○	○

NEXT

You scored your organisation in the Emerging Stage

Your overall score, based on the average across the seven themes, was **2** out of **5**. You have scored your organisation strongest in **Data**, **Uses**, **Analysis**. Your responses indicate priority areas to focus on are likely to be **Culture**, **Leadership**, **Skills**.

Your overview

	Unaware	Emerging	Learning	Developing	Mastering
Uses					
Data					
Analysis					
Leadership					
Culture					
Tools					
Skills					

Data diagnostic

Complete this simple questionnaire to to receive a tailored report on what data to collect and how

The data diagnostic asks 10 quick questions about what your programme or service is, who it targets, and whether any research exists to support your approach. If you're already collecting data, the questionnaire will act as a 'health check'. If you're colle

The diagnostic is most suited to organisations

https://www.inspiringimpact.org/self-assessments/data-diagnostic/

Does your project work with any of the following groups?

Select all that apply or leave blank if none apply

- [ ] People who are unemployed/at risk of becoming unemployed
- [ ] People who are homeless/at risk of becoming homeless
- [ ] Offenders/people in the criminal justice system
- [ ] Older people
- [ ] People with physical disabilities or their families/carers
- [ ] People with mental health issues or their families/carers
- [ ] People with physical health issues or their families/carers
- [ ] People with substance use and addiction issues
- [ ] Children (ages 0-11)
- [ ] Young people (ages 8-25)
- [ ] Parents/families
- [ ] Refugees/immigrants/minority groups

PREVIOUS QUESTIONS   NEXT QUESTIONS

◄ back to **Communications and campaigns** | next: **Security and data**

Getting started

🖼 **DATA AND INSIGHT**

https://tools.ncvo.org.uk/digitalmaturitymatrix

We have a clear, measurable plan for how we will use data ⓘ to improve our work.

Where are we now?: ○ ○ ○ ○ ◄ Choose an answer

Where do we plan to be?: ○ ○ ○ ○ ◄ Choose an answer

Add your notes (optional):

We collect data about the people who use our products and services and how they use them.

Where are we now?: ○ ○ ○ ○ ◄ Choose an answer

Where do we plan to be?: ○ ○ ○ ○ ◄ Choose an answer

Add your notes (optional):

Next steps…

- ✓ Introduce your organisation to the Data Maturity Assessment tool
- ✓ Implement better data capture and strategic data use
- ✓ Book on [Excel](#) & [Infographics](#) training on 16th December
- ✓ [Sign up to our eNews](#) for future Datawise London opportunities

- ✓ Let us know your specific data challenges and we'll provide follow up 1:1 support email info@superhighways.org.uk

[Datawise London project info here](#)

Thank you for listening

KATE WHITE, SUPERHIGHWAYS

info@superhighways.org.uk

www.superhighways.org.uk

@SuperhighwaysUK