

How can we develop the capacity of third sector organisations to engage with data? 4th February 2015 Scottish Universities Insight Institute

Gaining ground in the big data challenge

Big data could be a valuable resource for third sector organisations but as this series of workshops has shown, making sense of it and using it to measure our successes and influence service development and policy presents huge challenges – lack of skills, resources and trust around sharing data are big barriers to maximising insight. So how can we move forward and glean more information about third sector activity?

In this final workshop we asked, 'how can we develop the capacity of third sector organisations to engage with data?'

Digging deep with big and awkward data

Keynote speaker Madeleine Thornton Monitoring and Evaluation Manager at Buttle UK

Buttle UK is a grant giving charity helping families living in special or challenging circumstances. Their annual £4m budget is split between small grants for basic needs and larger grants for family members facing issues such as domestic abuse. With 7 years of good data, comprising 150,000 client records, Madeleine's job is to look at where and how monies are being spent, identify target areas for future awards and Buttle's fit with potential funders.

Here are her three routes to finding answers: **Geographic:** who are we reaching (or not)?

By creating a map of grants awarded and overlaying this with the Indices of Multiple Deprivation, Madeleine confirmed Buttle UK funding was reaching deprived areas. To get further insight she mapped out areas where no grants had been requested in the last four years and found deprivation levels there were also high.

Action: Raise awareness of Buttle UK in primary schools and children's centres throughout these areas.

Client experiences: where should we target services? Buttle UK creates a client record for every family awarded funding with a code signifying reason for their grant. A valuable data set so, unsure how to extract the right information, Madeleine signed up for her first DataDive, a weekend workshop hosted by US charity DataKind that pairs volunteer data specialists with non-profit organisations.

Over the two days they conducted an affinity analysis to identify co-occurring family problems. Results identified two groups:

Group I – domestic abuse, poverty and health or mental health issues

Group 2 – homelessness, drug misuse and young parents Action: Use this hard evidence to develop services.

Text data: data mining for knowledge

Madeleine's next and biggest challenge is to extract more knowledge from beneficiary records and the charity's new text survey for grant recipients. By using data mining methodology to identify keywords and common factors she hopes Buttle UK can get ahead of the game by targeting services before people know they even need them.

To round off our last workshop in this series, we asked you:

What would you like to see from a Scottish Network for third sector data?

'Open to small community-based organisations'

'A forum for sharing learning experiences'

'Sharing examples of what third sector organisations are doing with data'

'More input from the private sector'

'Link webinars with a discussion network'

Collaborating for results Georgina Eaton & Tillie Paul The Justice Data Lab

Launched in 2013, the Justice Data Lab is a pilot programme run by the Ministry of Justice that provides data to organisations working to reduce reoffending so they can measure the success of their interventions.

How does it work?

- Organisations complete a template with details of a minimum 60 individuals to ensure results are significant. Data is non-sensitive and last offence must be at least one year ago to give time for possible re-offending.
- 2. This dataset know as the treatment group is matched to police records to identify criminal history, demographics and sentence relating to the service provider's intervention, then DWP records to look at employment and benefits.
- 3. The Justice Lab creates a control group made up of similar type offenders with no intervention from service providers.
- 4. Control and treatment groups are matched to look at reoffending rates and determine if and where services have made an impact.
- 5. Results are turned into accessible visual data for the service provider.

There are ways the evidence base could be improved – for example, by adding severity of re-offending and reincarceration rates, results would become even more meaningful. But there are also limitations, for instance identifying the motivation behind reoffending.

That said, as winners of the Royal Statistical Society Award for Official Statistics and the Government Finance Insight Award, the Justice Data Lab are well on their way to making a difference with big data.

Data and Information Use in Scottish Charities

Eleanor Burt & Alasdair Rutherford

Data and information are key strategic resources for charities. Yet we know very little about how they capture, manage and use these resources. The research reported here is a first step towards understanding the extent to which, and how effectively, Scottish charities are engaging with data and information. Drawing from our recently completed survey of some of Scotland's largest charities, our findings show that while some charities are leading the way confidently with data and information, most are not using these optimally, and a number are significantly challenged.

At the end of 2013, we sent out a postal questionnaire survey to 704 Scottish charities to find out,

- to what extent Scottish charities are using business critical data
- key sources of business critical data
- what aids utilisation of this data
- what impedes utilisation of this data

Here are the headline findings from our research:

- A small number of the charities we looked at can be described as Struggling with data, while the majority are Managing or Just about Managing and a few are Pushing the Boundaries.
- Charities that are Pushing the Boundaries led the way in reporting seven of the ten data sources we looked at, including three of the newer types – social networking forums, smart cards and data analytics – as being extremely useful.
- 75% of the Pushing the Boundaries group reported that leadership was extremely important in driving data utilisation, by contrast with 42.5% of the Managing group and fewer than 40% in each of the Just about Managing and Struggling groups.

Download a summary of research findings here.

What could you contribute to a Scottish Network for third sector data?

'Practical sessions on using data such as census migration and household estimates etc.'

'Analysis skills'

'Training in statistics and evaluation (quantitative) methods'

'Experiences of trying to upgrade or replace data management systems'

These are just a snippet so thanks to all for your comments and suggestions. If you would like more information, please email us at info@thinkdata.org.uk

Café conversations

Café conversation with Ishbel Duncan, The University of St Andrews

Ishbel on data security and privacy issues: Can we own our own data and do we have the right to be forgotten? We are fast becoming a 'datafied' society with masses of information collected, analysed, shared and even sold on, so how do we know what has been written about us and control how that information is used?

What we spoke about:

- We are reliant on security and ethical processes within organisations because wherever there is data, someone at some level can access it.
- If we did have a system of consent and ownership, would vulnerable adults understand enough information to make informed decisions?
- Currently no central authority responsible for data falsification or misuse.
- Security blocking can be damaging to data analysis.
- Improve security and defend data by thinking about it from attacker's point of view.
- If individuals had control over data, could they falsify their own records?
- Does the 'right to be forgotten' conflict with the concept of big data?

Café conversation with Eleanor Burt, University of St Andrews

Eleanor on information governance and ethical

dilemmas in data utilisation: Eleanor offered several scenarios to spark conversation around protection of personal data – how is our data protected and when we submit personal information online, do we stop to think about what we are giving away or do we even care?

What we discussed:

- While many people have reasonable awareness of how data could be used, what about those who do not and how do we protect vulnerable groups in society? And Terms & Conditions – do you read the jargon?
- UK organisations must adhere to minimum data protection requirements as set by the Data Protection Act (DPA) but online businesses may be covered by country-specific legislation which vary in effectiveness.
- Third sector organisations have been fined for breach of data but those with limited resources put their energies into service delivery, leaving little time to think or understand enough about data protection to ensure good governance. Could DPA training help?

Café conversation with Alasdair Rutherford, Stirling University

Alasdair on data analysis training for the third sector: From data entry to coding, collection, analysis and linkage, data is used across a range of jobs and with different technologies, but many of us are learning as we go along. So how can we build capacity in the third sector to improve knowledge, approach and processes?

We discussed:

- Build relationships between organisations to share data and stop duplication of work.
- Create learning opportunities by bringing academics and organisations together – The Urban Big Data Centre (UBDC) and Administrative Data Research Network (ADRN) are two current sources of support. This approach could also address the mid-level training gap.
- Set up a mentoring network if you receive training, you in turn train other people.
- Introduce a 'grades' system so third sector workers recognise where they sit in terms of skills levels and training opportunities can be better targeted.
- Would a data centre for charities like the Justice Data Lab work in Scotland?

Café conversation with Mariken Schipper, Scottish Government's Analytical Exchange Programme

Mariken on data analysis for third sector organisations – short, sharp interventions: We work with third sector organisations who need help to gather and analyse particular sets of data to determine services or project outcomes. The statistical support we give is free and lasts for up to ten person days over an agreed period. A total 65 projects were commissioned by the government between 2012–14, providing 150 days of work.

To take an example, we recently worked with a charity who needed quantitative evidence to show funders their work with people with learning disabilities yielded tangible results. By looking at financial data they were able to demonstrate that their intervention meant beneficiaries became less dependent on care and so costs decreased.

What we talked about:

- With a general lack of analytical training in the third sector, many organisations need this type of support. Suggested AEP could signpost to free academic statistics training so charities gain skills to solve future problems.
- Are charities protective of data with small client numbers, do issues of identification arise?

Your feedback

A great response - you told us the general quality of this workshop plus SUII facilities were very good or excellent.

What did you find most important?

'Excellent talks and networking'

'The speakers'

'Insight into existing uses of data and research actualities'

'Discussing how interested 3rd sector is in their data. And the good understanding of what this involves'

What will you take away from the event?

'New outlook on big data'

'Barriers for accessing data for 3rd sector organisations'

'Wider awareness of topics and interest'

'Contacts and better understanding of big data issues'

'Share learning with others. Different ways data can be used'

Scottish Network for Third Sector Data

The Scottish Network for Third Sector Data brings together third sector organisations, public sector bodies, researchers, academics and students. Our aim is to use the network as a platform to build relationships, partnerships and training opportunities that encourage engagement with big data in ways that benefit your work and organisation and influence third sector policy.

Membership is free – find out more at www.thinkdata.org.uk or email info@thinkdata.org.uk