



Local Government Open Data Breakthrough Projects Evaluation Report 2013/14

Project title: Devon Open Data Programme
Local Government Community Data – opportunities for localities and businesses

Lead organisation: Devon County Council

Submission date: 22 August 2014

Type of project:

The Devon Open Data Programme is an innovative programme which harnesses the power of Hackathon Events together with Community and Business involvement to prioritise the release of Open Data.

Total grant: £27,835

Summary of the project

This programme aims to facilitate and broker relationships in communities, business and other agencies, with developers and data user groups and societies such as hackathons as a way to promote and develop uses of open data.

We aim to discover this value from events such as Hackathons both Local and National, Open Data Forums, locality awareness and service design. We would showcase products from these events to a wider audience, targeting for example: Age UK, CAB, Social Enterprises and similar organisations – this would then promote a facilitated discussion and bring all sides of the data suppliers and users together.

Any products that look to add good social value we would like to develop further to extend the data used and source the data being required. For example this may provide information on levels of demand (population numbers, deprivation and other characteristics) and supply (community and business directories, as well as an indication of (potentially modelled) public spending in their areas. This live 'local needs assessment/market position statement' should inform community and business decisions, especially, perhaps, in the field of social enterprise.'

The breakthrough funding has achieved a number of activities in the programme. This has included a number of Hackathons, Open Data Forums and the release of Community Directory data to defined standards. Further work is required to continue to build our Open Data infrastructure, create an inclusive, accessible interface for anyone who wants to use the data and the

growing of the Devon open data community - including supporting the setup of the ODI Node for Devon

When the programme is complete we expect to have released further datasets, have a clearer idea as to prioritise the release of future open data and have on-going community, business and developer networks that can sustain progress.

Challenge/opportunity:

The programme acknowledges that initially as a local authority we knew that open data had great value, but we did not know where that value existed.

The Grant has funded the following activities

1. 3 x Hackathons

- Hackathon, Plymouth University, November 2013. Attended by 15 developers.
- Hackathon, Plymouth University, March 28/29 2014 Attended by 10 developers
- National Hack the Government event, Exeter, 9th March



The hackathon events produced some very good outputs in a short time frame.

For example the first event produced prototypes including an app to show Public health data teen pregnancy, an app to help you with Library reminders, an app to for older people to stay independent, an app to extend our community directory data set and filter it for clubs and societies, also an app to allow you to enter your postcode and view and see a rating for the neighbourhood around you.

The second event produced a university course finder - metadata satisfaction rate / link to university web pages, an app to help community things that were wrong – give locals with rewards - points as reward, educational game with questions.

Hack the Government – produced an app called Pathify to record walks.

Though the outputs were very useful the use of Devon's data was limited and how we proceed further with the prototypes produced is still unclear.

2. User and Community Involvement

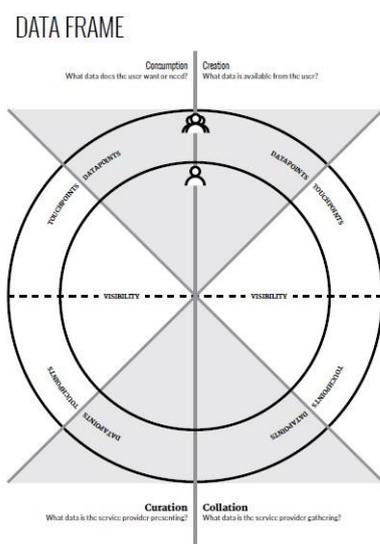
- Initial Open data forum held 27th February, attended by 25 people from private, voluntary and public sectors, including data providers and developers attendees included:
 - Citizens Advice Bureau
 - Exeter Council for Voluntary Service
 - NHS England
 - Land registry
 - Exeter University
 - Devon County Council
- Open Data Forums 28 May 2014, 16 July 2014 and 26 August 2014.
- ‘The Power of Open Data in Local Government talk given to [The Exeter Initiative for Statistics and its Applications](#) (ExiStA) 20th May 2014



- ‘Open Data and Information Event’ Engagement with Healthwatch to ask service users what information is important to them and how they use it in their day to day lives, barriers and new ideas. The infographic from this session can be viewed here:- <https://t.co/5ULIx3A1Cz>

3. Service Design – XGovJam

- xGovJam – Service Design 3-5 June 2014 including participants from Devon Fire and Rescue and Devon and Cornwall Police. Trial of Data Frame, follow on prototyping with Open Data Forum at an X Hack Jam on Saturday 28th June.



The Data Frame is designed to provide a tool for service innovation through humanising data. It also creates a shared resource for exploring key questions around data. It can be started from the top for user-centred applications and from the bottom when experimenting with data sets. It would work well in situations where existing research, Persona development or Journey Mapping has been undertaken, transferring existing material to the Frame, but it can also be used to explore

potential users and feed into the creation of other materials.

4. Community Directory data – LeGSB work

The Community Directory aims to provide an information directory for use by the public and DCC staff working on behalf of the public, on individuals and organisations who provide local services to assist the people of Devon in meeting their needs (for more information about the directory please see Appendix 1).

As the Community Directory data extract contains about 130 fields the first task was to identify those fields that were most useful in answering a few key questions:

- What is the service? Name, description
- Where is it? Venue details, grid reference
- How do I find out more? Contact details, webpage
- Am I eligible for it? Age criteria, referral required.
- How much is it? Costs

The dataset was then reduced to around 40 fields which give a rich description of each service. We then created a core 20 field template for community data in XML format, using URIs where available with the ability to turn into linked data (please see Appendix 2 for more details).

Community Directory data are available from the 'Opening up our data' page and now on data.gov.uk:-

<https://new.devon.gov.uk/factsandfigures/open-data/opening-up-our-data/>
<http://data.gov.uk/dataset/devon-county-council-community-directory>

We have taken the community directory data in its new open data format and produced the following prototype:-

http://www.amazingcreative.co.uk/dev/devon_directory/index.php

5. eXist Database Prototyping

eXist is an open source database management system entirely built on XML technology. We are prototyping that this technology as a good way to deliver APIs to Open Data.

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XML, JSON and HTML navigable versions here: http://ec2-54-200-75-7.us-west-2.compute.amazonaws.com:8080/exist/restxq/data  
http://ec2-54-200-75-7.us-west-2.compute.amazonaws.com:8080/exist/restxq/data/community  
http://ec2-54-200-75-7.us-west-2.compute.amazonaws.com:8080/exist/restxq/data/community/service  
http://ec2-54-200-75-7.us-west-2.compute.amazonaws.com:8080/exist/restxq/data/community/service/ffcedbc7.xml
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The prototype will work with our Community Directory Data and deliver APIs for developers.

6. Open Data Training

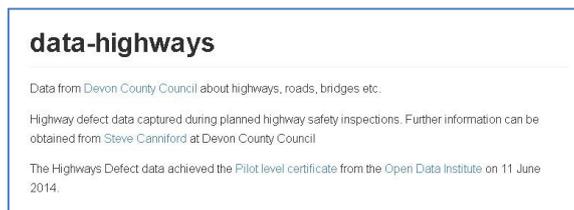
The ODI delivered two days of Training, Open Data in a Day and a second technical day. The training widened the knowledge of Open Data within Devon County Council with 16 people training on the first day and twelve on the second.

We used Open Refine to quickly clean data. Learnt some techniques for visualisation and published our Highways data on GitHub:-

<https://github.com/DevonCountyCouncil/data-highways>

Together with our first ODI Open Data Certificate:-

<https://certificates.theodi.org/datasets/1946/certificates/14338>



7. Internal analysis of the following:-

- Analysis of FOI requests and associated data demands
- Analysis of Customer Service Centre data requests

Initial analysis found that we did not hold enough detail of past requests to allow this to be a good information source to prioritise data releases, but this means we found out what we need to do differently to get the right information.

Data published and uses:

Publication on data.gov.uk

Current publication is in beta format, and publication on data.gov.uk to be assessed, particularly on the basis of ability to report and update regularly.

- Transparency Guidance data, plus:
- Devon Community Directory released as open data
<http://data.gov.uk/dataset/devon-county-council-community-directory>

- Publication of DCC information asset register in open format
- Highways data released
- Libraries' borrowing data

<http://new.devon.gov.uk/factsandfigures/open-data/>
<https://googledrive.com/host/0B6L9MhoqPozKbWxYaHhuOUNBTE0/OpenData/>

Please note the asset register data hasn't been updated for some time, so is not currently published on data.gov.uk. Highway and Library data form test datasets.

8. Outcomes, Key Learning and Future Goals

The key learning from the project is that to obtain value from Open Data developers need standards and reliability, but citizens need stories and simple access to understand what the data means, this could be the most important to reach people.

- The need to focus on stories for citizens to consume open data.

Hackathons provide value but this value can not be pre-determined developers may also require Personas to be able to connect with the type of people the application is aimed for. Usually developers have their own 'pet' interests and our given up their time for free, so guiding them to use particular datasets or topics is a challenge.

- Hackathons provide value but this value can not be pre-determined and has no guarantees.

Building an Open Data network locally takes time and perseverance, together with resourcing. People usually do not know what data a Local Authority has and therefore do not ask for the data. During the programme we have had very few requests for data.

- The formation of an ODI Devon node would be the ideal vehicle to further develop and align business needs with data supply.

During the project we have found out that our internal recording of any data requests is poor and does not help identify any priorities, this means we need to consolidate and communicate available data in better ways. The project has raised internal awareness and the potential for systems to provide a publishing capability; currently we are reviewing these for suitability.

- Developers need standards and reliability that could be provided by a data platform, though there is little appetite for advanced file formats.
- Internal analysis of data requests is poor.

Value from Open Data

		VALUE FROM OPEN DATA		
Key Learning	Building a network takes time and resources	<p>Developers need standards and reliability</p> <p>Citizens need stories</p> <p>Hackathons provide value but this value can not be pre-determined</p>	<p>Consolidate And communicate available data</p> <p>Data stores can get complex quickly</p> <p>Internal analysis of data requested is poor</p> <p>Very few requests for data</p>	
Act.	1	GOAL	2	3
Future Goals	<p>Devon Open Data Community</p> <p>ODI Node</p>	<p>Opportunities to release data, create applications and tell data stories</p>	<p>Data Store</p> <p>Support Partners</p>	<p>Accessible Interface</p>

Future goals and activities are shown below in our Open Data Strategy:-

Goals

- To increase transparency and accountability by releasing information freely wherever possible;
- To stimulate innovation and growth in Devon's economy by providing the data that business can use to build useful data products and information services.

Activity

There are three areas of work:

1. Building the infrastructure

- a. A data store, procured and supported by Devon County Council, for use by us and any interested partners. We will offer this as a

- service to public and voluntary sector partners in the first instance including District councils, fire and rescue service ...
- b. Supporting partners to develop their own strategy and identify data sets for release.
2. Creating an inclusive, accessible interface for anyone who wants to use the data
 - a. A webpage or series of webpages setting out the catalogue of data sets available and providing easy links to each one.
 - b. Using ODI licenses and standards to make sure there are as few barriers as possible (preferably none) in the way of people finding and using the data sets they need.
 3. Starting or joining the Devon open data community
 - a. Bringing together data enthusiasts, armchair auditors and data businesses and working with them to find out what we should release first, how to do it in the most helpful way, and what we should do next.
 - b. This includes supporting the setup of the ODI Node for Devon

Benefits and impact

There are a number of impacts of publishing the data or providing a service to your organisation and to the data users that Devon is hoping to achieve such as:

- transparency, awareness
- reduce Freedom of Information queries awareness
- help communities develop their own service new strategies to share info
- promote economic growth

The current impact of the project has been awareness raising with partner organisations and local developers, also the increased awareness internally within the council.

As the programme develops and Open Data networks within Devon mature we expect Open Data to have benefits within the Devon economy and communities, though the timings of these benefits and impacts are hard to quantify at the current time.

9. Project summary

Summary

The grant has allowed Devon to broker relationships in communities, business and other agencies, with developers and hackathon societies to discover and promote the value from open data. This has significantly increased our knowledge of Open Data.

The programme will continue with a number of activities for Devon to become a leader in Open Data, with the goal of increased transparency and accountability by releasing information freely wherever possible and to stimulate innovation and growth in Devon's economy by providing the data that business can use to build useful data products and information services.

Further information:

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<https://new.devon.gov.uk/factsandfigures/open-data/opening-up-our-data/>

APPENDIX 1

The Devon Community Directory:

- a) aims to provide an information directory for use by the public and DCC staff working on behalf of the public, on individuals and organisations who provide local services to assist the people of Devon in meeting their needs.
- b) helps to meet DCC's statutory responsibilities under the NHS and Community Care Act 1990, ensuring the citizens of Devon have access to information and advice on adult health and social care to help them make informed decisions about the services they need.
- c) helps to meet DCC's statutory responsibilities under the Childcare Act 2006, ensuring the citizens of Devon have access to information and advice on child health and social care, childcare and children's services to help them make informed decisions about the services they need.
- d) offers organisations and individuals the opportunity to publish globally information about the services they operate in Devon, how these can be accessed, in what quantities, where, when and by whom.

The Directory's primary function is to hold information on organisations and individuals providing local services. A local service is one that:

- is provided within Devon by an organisation based in Devon
- is provided within Devon by an organisation based outside Devon
- is provided close to the border of Devon.

The Directory's secondary function is to hold information on organisations providing services nationwide that may be useful to the people of Devon.

The term 'Devon' is the local authority area covered by Devon County Council. This does not include the unitary authority areas of Plymouth and Torbay which operate their own directories.

The Directory may refer users to other directories which hold comprehensive information on particular subjects, such as:

- Active Devon for physical activity and sport.
- Yell.com or other sources for general trades and trades people that are not in short supply, for example, plumbers, electricians, builders, gardeners and hairdressers unless they offer discreet health and social care services and children's services.

Where DCC believes that including it would add value, the Directory may harvest data from other websites or receive regular data updates from other organisations, presenting such data in the Devon Community Directory, For example:

- Care Quality Commission data on care home and personal care providers.
- Ofsted data on registered childcare.
- NHS Choices data on surgeries, hospitals and dentists.

APPENDIX 2

These fields have been turned into an XML file. LeGSB have provided guidance on element names and structure based on previous work with DWP and Hampshire's planning application project.

The full 40 fields was further reduced to around 20 fields that were considered the core minimum set required to provide enough information to users to be useful. A CSV of the data using this minimum set can be produced from the XML file, which could act as a template for other authorities to produce similar datasets.

Where existing URIs exist these have been included in the XML file, such as district areas from the Ordnance Survey and locally produced town areas store on ESD's Natural Neighbourhoods tool.

A small amount of data was converted to RDF triples and successfully loaded into a locally run triple store and queried. Currently looking at whether the full XML file can be converted in this way and where it can be loaded – possibly using Amazon EC2 and the open source Fuseki triple store.