Local Government Open Data Breakthrough Projects 2014/15
Evaluation Report

Project title:

London Borough of Hounslow: Customer Data Gateway

Lead organisation:

London Borough of Hounslow

Date report is submitted:

28 April 2015

Type of project:

Data release, standards, platform/tool development, engagement, data usability

Total grant:

January 2014 to October 2014 = £19,000
November 2014 to March 2015 = £43,000

Summary of the project

The development of a cloud-based open data portal to support the expansion of the London Borough of Hounslow's open data work and role as regional leaders in the field of open data.

Challenge/opportunity:

Through this open data project, the council set out to:

● Develop and pilot the cloud-based hosting of London Borough of Redbridge/CIPFA's DataShare tool on the council's Amazon cloud web server, and demonstrate the benefits of this open data application to other local authorities.

● Use this innovative platform to substantially increase the range of data available to local residents, supporting the council's move towards making its data more accessible, increasing transparency, improving Freedom of Information (FOI) team response times, and driving service improvement.

● Take a lead in in the promoting best practice in, and the innovative use of, open data.

Approach to publishing data

Responding to customer demand
Hounslow's approach to publishing data is informed by customer demand. In preparing our bid for this funding application we established themes by examining the information that residents and others have asked for through Freedom of Information requests. We used this knowledge to select which datasets to publish.

A cloud-based open data application
The London Borough of Hounslow's IT strategy includes migrating applications onto an Amazon cloud web server. This integration of systems improves services for local residents and businesses through real-time information sharing via any device, as well as saving on infrastructure hosting costs. As a key element of delivering this approach, we have used the Open Data Breakthrough Fund project to develop the DataShare application to operate through the cloud.

We have migrated open datasets that were initially hosted directly on the council's website onto DataShare allowing for greater functionality for the user, including filters, charts and mapping of data. DataShare also provides a more robust platform for integrating our data with third party services and websites. The application automatically publishes the data for each schema in the XML format making it easier for others to use in their applications.

We have also used DataShare's features to cross-reference our data with other information sources. For example, linking the Registered Charity Number for charitable bodies receiving council grants to the relevant record on the Charity Commission website. The proper configuration of the schemas within DataShare also ensures that metadata about a dataset is automatically published.

Following the resolution of technical issues concerning the hosting of DataShare on the council's Amazon cloud web server, the application was launched in March 2015.

Meeting national requirements, adapting to local needs
We have used the project to enable the council to meet the requirements of the Local Government Transparency Code 2014 and the competitive Local Open Data Incentive Scheme. Both of these challenged the council to produce datasets that comply with national schema. In many cases this required finding and extracting data and going through the lengthy process of formatting it to meet pre-determined standards. A list of all of the datasets we have published can be found in Appendix A.

While our objective was to ensure that the data we published conformed to the relevant nationally established schema, we were also aware of the need for this to happen within the specific context of the London Borough of Hounslow, for example our existing business systems and processes, so we audited each national schema and created a local version (including guidelines and decisions about optional fields) whilst still complying with the national schema definitions.

Publishing high quality, accessible datasets
We have adopted the approach of making data open by default, accessible and up-to-date. This project has enabled us to create procedures for the production of high quality datasets. We secured Open Data Certificates for some of our datasets and have built the Open Data Institute's certification process into our future work programme. We have registered a number of our datasets with data.gov.uk and will seek to develop our profile on this national site.

We ensure all of the data is checked for information that could identify individuals and redact this where necessary. Where available, we use national schemas to inform our presentation of the data to enable cross-organisational comparisons to be made. Where there are no national schema, we have been working to develop our own, for example with Customer Interaction information, and we have discussed with ESD putting the beta versions out to national consultation through their website and networks.

Encouraging open data driven innovation
In March 2015, we held a DataShare Launch event and a Data Discovery Day workshop, attended by over 50 council officers from Hounslow and other authorities, from the LGA and from the council's partner organisations. The aim of the events was to inspire attendees about open data, inform them about the tools and support that they now have access to, including DataShare, and to encourage them to think of ways that open data could be used to help improve the lives of local residents and service users.

The Data Discovery workshop, delivered by FutureGov, included interactive exercises for participants to experience blending datasets to create new insights and using service design principles to understand user needs and how open data might be used to improve how these needs are met. At this event, we solicited feedback from participants about future datasets that they either could produce, or would like to see produced, and used this to create a wish list that will inform the prioritisation of future datasets.

FutureGov also used this event to showcase the outcome of a Hack Event that they ran prior to the event, using Hounslow's open data to prototype new service offerings, described in more detail in Appendix B.

Benefits and impact

Through this project we have demonstrated that DataShare can operate effectively and robustly on a cloud-based server, with all the operational and financial benefits that this brings to both London Borough of Hounslow and other authorities that choose to do the same. The project has also acted as a catalyst within the council for the release of an increased number of open datasets from across a wide range of council departments and greater data transparency throughout the whole council.

The technical issues encountered in adapting DataShare for the cloud, though now fully resolved, had a major knock-on effect on our ability to achieve all of the project deliverables within the original timescale. As a result of only formally launching the application at the end of the project, more work remains to be done to promote DataShare to the public, local businesses, other councils and other customers as a key access point for open data about the borough.

The process involved in extracting, formatting and publishing the datasets throughout the duration of this project was of great benefit to the council as it involved officers from across a range of council departments who had not previously been involved in open data work. The experience has enabled us to identify who, in the council, could provide resource for this work and to develop procedures for publishing open data directly with those taking responsibility for producing the datasets. We have also identified barriers standing in the way of data publication, including lack of digital systems for storing data needed (for example with Premises Licences) and missing data (for example missing a full set of Unique Property Reference Numbers (UPRNs) for inclusion in relevant datasets), and the need to create procedures for ensuring compliance with information governance standards.

We have begun the process of establishing an Open Data Working Group made up of officers from across the council. This will act as a forum for mutual support and the sharing of best practice, and as a mechanism to ensure that the open data agenda is embedded within the council. Also, to further support council officers engaged in work on open data, we have begun the development of a training module on open data and the use of DataShare that will be included within the council's online e-learning system: Learning Pool.

Over the course of the project we have already engaged with eight London Boroughs (Barking & Dagenham, Brent, Hackney, Hammersmith & Fulham, Harrow, Kensington & Chelsea, Redbridge and Sutton) and the Director of the West London Alliance. Now DataShare is live, we have showcased it to a number of officers from other authorities who attended the launch event. We now intend to proceed to promote it more widely to other local authorities.

We have published our data through Data.gov.uk, and are in discussions with the London DataStore about whether the search functionality on their website can locate open data from the London Borough of Hounslow. As well as increasing wider access to open data, this will also help to support cross-borough transparency through presenting related data via a single portal.

Future success factors, and the focus of the Open Data Working Group, will include substantially increasing the number of hits and click-throughs on the relevant open data pages compared to the current baseline below and reductions in use of Freedom of Information requests as a key channel to access data about the council.

Further information:

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http://data.hounslow.gov.uk/ and www.hounslow.gov.uk/opendata

Appendix A

Data published and uses

Number of bodies consulted

London Borough of Hounslow departments, partners, West London Authorities, LGA, ESD, London Borough of Redbridge, Peterborough City Council.

Number of datasets published within period

The London Borough of Hounslow has published the following datasets:

Council structure & Employee information
- o Council constitution (not in open format)
- o Organisation structure
- o Pay multiple
- o Senior salaries
- o Trade union facility time

Environmental services
- o Premises licences (current licences only)
- o Public health funerals
- o Public toilets (which have also been indicated on the built in map using coordinates)

Finance and assets
- o Counter fraud work
- o Expenditure over £500
- o Land and building assets
- o Government procurement card transactions
- o Procurement information, including waste contracts (via portal)

Local community
- o Grants to voluntary, community and social enterprise organisations (including links to the charity profile on the Charity Commission website where a registered charity number has been provided.)

Planning
- o Planning applications (subset) (including links to the relevant record on Hounslow's own planning portal using the application ID)

Parking and traffic data
- o Bus lane contravention hot spots
- o CCTV contravention hot spots
- o Moving traffic contravention hotspots
- o Parking account
- o Parking enforcement
- o Parking permits
- o Parking spaces (including number of motorcycles spaces, which is additional to requirements)

Volume of data downloads within period

Baseline of open data hits and click-throughs for www.hounslow.gov.uk/opendata. DataShare statistics are not yet available, as the application only launched at the end of the project period.

Period	Hits	Dataset downloads
01 Jan 14 to 31 May 14	228	<10
01 Jun 14 to 31 Oct 14	193	20-30
01 Nov 14 to 31 Mar 15	206	10-20

Datasets downloaded most often

Statistics relate to www.hounslow.gov.uk/opendata

Council spending over £500 = 47
Annual Accounts = 4
Organisation Chart = 2
Constitution link = 2

Number of users within period

Statistics relate to www.hounslow.gov.uk/opendata

1 January 2014 - 31 March 2015 = 627 hits

(Broad) type of users (if known)

Council officers and external users

Appendix B

Case Study of Data Use: FutureGov's Hounslow Open Data Hack Day

On Monday 16th March 2015, the FutureGov team of designers and software developers held a 24-hour design sprint, using Hounslow's open data to prototype new service offerings. The challenge question for the hack was: "How can we better support individuals and the communities they live in to become more resilient, improving local outcomes whilst also reducing the demand on public services in Hounslow?"

During the day, the team moved through four phases:

1. Inspire Frame the challenge with background research, user personas, successes and failures existing services, and available datasets
2. Diverge Remove constraints and brainstorm new or improved service offerings which could make use of available, or as yet unreleased data
3. Decide As a team, shortlist ideas against criteria devised from original challenge, and any user or business constraints
4. Prototype Bring ideas to life through functional prototyping, sketching and visualisation

The team produced 24 ideas and developed two prototypes. The first prototype was for an Accessible Community Marketplace. The problem being: *Users are having to fill out complex forms to request a Dial-a-Ride. None of their data is kept, it's paper based and takes time.* They created a prototype for a "Find a Driver" application, using the principles of the taxi app, Uber, to create a response booking service for Dial-a-Ride users and their families.

The second idea, Opening Disused Spaces to Community Action Groups, was developed in response to the problem: *The council has underused buildings. Community groups are looking for spaces to meet or work.* The team developed the prototype: Available (http://available.herokuapp.com/), an application for finding space for meetings at short-notice in Hounslow, in response to this.

Available:

I need a meeting space for 30 people
in Hounslow on Wednesday at 5pm
Find your space

We've got
Factories
Warehouses
Meeting rooms
School halls

Others have looked at
Shop
Warehouse
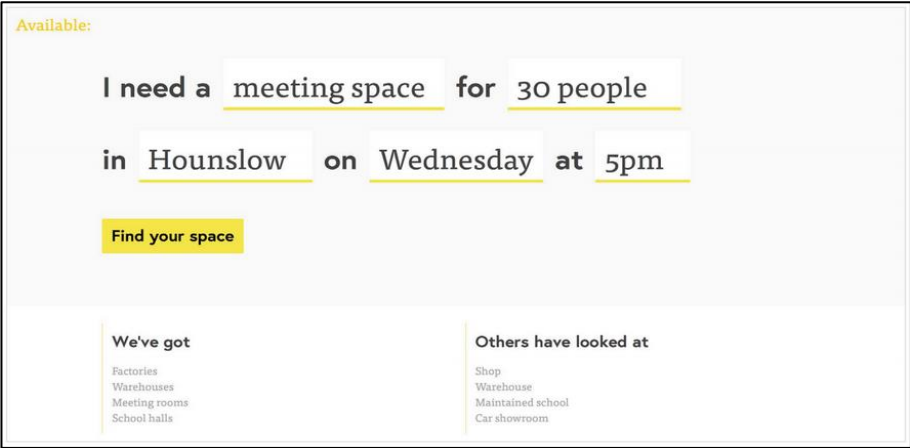Maintained school
Car showroom

Image: Screenshot of the "Application" prototype

The council intends to use FutureGov's work to demonstrate to those in the local business community, including those located on the Great West Corridor of the A4 and M4, or the Golden Mile, the potential civic and commercial value of using the council's open data to create digital applications.