

Local Government Open Data Breakthrough Projects 2014/15 Evaluation Report

Project title: A Local Plan for Local Data

Salford **DATA QUAY**

Lead organisation: Salford City Council

Date report is submitted: 29th April 2015

Type of project: Platform/tool development with release of data

Total grant: £31,000

Summary of the project:

The project involved establishing a City data portal, ([Salford Data Quay](#)) that can bring together in one place, (open) data about the City (e.g. from public, private and voluntary organisations) for the City (where data can be better promoted to better inform and transform Salford's future). It is based on [CKAN](#) technology (open source data portal software that has been used nationally and locally by other data portals including [DataGm](#) and [Data.Gov](#)). The portal was also required to integrate with an external data store that is able to hold data that meets 5 star linked data standards, (this is based on a [rating system for the publication of open data](#)ⁱ that covers a 1 to 5 star with 5 star data being able to link to other data to provide richer context). As an exemplar of how the portal could be used the project covered the release of at least 10 datasets (with at least one being 5 star) that inform the development of Salford's [Local Plan](#).

Challenge/opportunity:

Publication of data under [INSPIRE](#)ⁱⁱ and participation in the [Greater Manchester Data Synchronisation Project](#) (GMDSP) had so far lead us to use two different data portals, [DataGm](#) (regional) and [Data.Gov](#) (national). There was a gap in offering a third level, 'local portal,' as platform for a more bespoke 'City' portal for smaller localities that:

- Gave us more control/influence over how datasets could be indexed to enhance discoverability and enable us to encourage contribution of data and promote datasets more locally, (e.g. better signpost and engage with the City's partner organisations and community users by branding it as a City portal).
- Supported the role of the national and regional portals by simultaneously populating their dataset catalogues to widen accessibility to the same data via a number of paths, (depending on whether users had a national/regional or local focus).
- Can be adapted to support graduation to publishing 5 star linked data by integrating with 5 star triple/quadstore.

As an example we wanted to look at releasing data that was relevant to the development of the Local Plan to look at improving the consultation process by providing early access to the raw data that informed it.

Data published and uses:

- To date we have published 44 datasets on Salford Data Quay, (10 of which were specifically identified as supporting the Local Plan) all of which are similarly accessible via Data.Gov and Data.GM.
- There is one 5 star linked dataset available via <https://salforddataquay.uk/dataset/allotment-sitesf5dc1> which links to data stored in a Linked Datastore that was provided and funded as part of the GMDSP.
- Other datasets include spatial datasets that are published under INSPIRE and datasets that have been published under the [Local Government Transparency Code](#) and [Local Government Incentive Scheme](#).
- The portal shares the same data source for those datasets that have been published via the GM Infrastructure Map project. This means that when the data sources are updated the changes will be simultaneously reflected both at Salford Data Quay and the Infrastructure map, reducing the duplication of effort in updating information.
- The portal has only just been completed and released to a limited audience which means that there are no current reliable figures on dataset usage. We have enabled Google analytics on Salford Data Quay to monitor usage so post election we will more actively promote the portal and should be able to provide more reliable figures.
- In addition 'dataset tracking,' has been enabled to allow all users to view popular datasets either by 'flame icon,' on those datasets or refining their search results by 'most popular.'
- As yet there are a limited number of registered users but again post-election this will be more actively encouraged.

Approach to publishing data

Consultancy

The following phases were delivered by a third party due to limitations on our own resources and expertise:

1. Installation of CKAN (open source) instance on Salford servers, (preferred over hosted solution as no annual costs to commit to)
2. Customise CKAN instance to a Salford theme and custom metadata
3. Set up portal to simultaneously publish the same data at all three portals, (Salford Data Quay/Data GM and Data.Gov) using harvesting tools
4. Link to 5 star data held in quadstore
5. Training (technical CKAN support and general Open Data) to build capacity within the authority to maintain the portal itself and advocate use of the portal

Harvesting

The desire was to have Salford Data Quay as a single point of publication for all Salford related datasets (so that we could capture custom metadata) however this was not possible. Due to the specific metadata requirements of spatial datasets that

have to be published under INSPIRE, these had to instead be published via the UK Metadata Editor (UKME) which are in turn nationally harvested to Data.Gov.

This caused a clash in the direction that metadata needed to flow between the portals and meant having to re-architect planned metadata flows between portals and use different harvesting tools (e.g. couldn't harvest INSPIRE metadata from Data.Gov as needed to also push metadata from Salford Data Quay to Data.Gov). As a result, Salford Data Quay now has two different types of datasets:

1. Non spatial datasets that are published/managed at Salford Data Quay, (e.g. edit/add Salford custom metadata) and from which metadata is then harvested to populate catalogues at Data.Gov and Data GM (using CKAN harvesters)
2. Spatial (INSPIRE) datasets which are published/managed at UKME and from which metadata is harvested to Salford Data Quay (using a spatial harvester). Although metadata can be displayed at Salford Data Quay the ability to edit metadata/add Salford custom metadata is restricted. This can lead to some inconsistencies in terms of being able to filter/refine search results on standard and custom metadata for spatial datasets.

5 Star Linked Data

Throughout the project we have also had to re-assess our approach to publication of 5 star linked data for a number of reasons:

- Funding for the 5 star quadstore (that was initially funded by the GMDSP) was not continued and as yet there is no formal agreement on an alternative.
- The council does not currently have the necessary skills or resources to commit to producing or storing 5 star linked data. Without some tangible examples of what linked data can offer (e.g. benefits over 2/3 star data) it continues to be difficult to build a business case to justify such investment.
- We feel there is currently a limited (niche/technical) audience for 5 star linked data and that our limited resources would be better employed publishing 3 star data that is accessible to both technical and non-technical users.

While the existence of one 5 star dataset is a useful example as a proof of concept that we can at later stage build on our existing CKAN framework with an external data store that would support 5 star data, we are not currently planning to convert any other datasets to 5 star standard for the reasons stated. However in future we will look at options to start making them, '5 star ready,' by advocating the use of standard schema's and URI's where possible. At the same time we will monitor developments around 5 star data (particularly local government guidance and examples) and re-assess the position as appropriate.

Accessibility

As the focus on Local Plan data is about encouraging community consultation and use of data we have been keen to ensure that non-technical/data specialists are also able to access the data. For that reason as a minimum we have tried to provide data in a .csv format so that it can be previewed in the platform's default chart/table/map previews. We have also provided spatial data in an open WMS (Web Mapping

Service) format for download and customised the portal to include a WMS preview enabling users to also view WMS files as a map.

Metadata and Standards

Keen to improve 'discoverability' of datasets, we looked at available information standards and both how users could search and/or browse to find data with the result that we have used the following:

- **Groups** (topics) are used to categorise into (12) high level topics based on Level 1 of the Local Government Function List and are navigable from the homepage as 12, 'buttons'. We felt that not only was this a standard that was being promoted by the LGA for inclusion in standard metadata for datasets - but also that despite its description - it was the most comprehensive spread of (high level) functions that could be also used to accommodate data from a wider range of contributors to the City portal (e.g. Emergency Services = Community Safety).
- **Search** is obviously a standard feature on CKAN portals but we looked at how users could better refine their search results to get to more pertinent data and to this end:
 - Will advocate use of standard refinements to enable users to filter by publisher, format, license and tags.
 - Will promote use of tags (free-form text field with auto-complete) to publishers as a more flexible way of categorising data according to any commonly/locally used terms, e.g. 'Local Plan'.
 - Have enabled users to filter search results by group - e.g. (Level 1 Local Government Function)
 - Users will also be able to filter by Local Government Functions (Level 2) and Local Government Service List as these have been added as custom metadata.
- **Publication Scheme Categories:** To better satisfy our obligations under the Freedom of Information Act, we have also made an alternative navigation route that sees data categorised according to the classes of information that are advised by the Information Commissioners Office for Local Authority Publication Schemes.

Sustainability

Despite the choice of an open source product that supports code sharing, (e.g. github) and the inclusion of CKAN technical training for ICT staff, (to enable them to maintain and develop the portal) we have found that:

- Relatively minor changes/developments seem to rely on (python) coding rather than configuration
- The level of python skills required exceed those that we currently have in-house.

For that reason we will concentrate efforts on maximising use of the portal that we now have by promoting it and maintaining it, but we are unlikely to develop further

functionality in the short-term unless funding can be secured to cover either consultancy to do this or recruit/develop python skill in-house.

Benefits and impact

Despite concerns about future development of the portal we do believe that we now have in place a good foundation that will support progress on open data as requirements and/or resources dictate.

We have recently demonstrated the portal (presenting the concept of open data as an alternative approach to traditional data-sharing between trusted partners) to Salford's Research & Intelligence Group, (a forum of key stakeholders working in Salford, e.g. council, NHS, Mental Health, Voluntary Services), where the opportunity to have data in one place and the visualisation options (e.g. mapping) were well received.

Specific impact on the Local Plan is less clear, in light of possible changes that the recent Greater Manchester Devolution Agreement may bring to the process. Although it may not as yet be actively promoted as part of a consultation process, the raw data that supports the process remains and is available as/when required.

The completion of the portal now offers the opportunity to bring data from across the city into one place, visualise and interact with it, (with integration of social media tools to promote the portal or individual datasets) and at the same time contribute to regional and national pictures. We feel that it therefore serves as a replicable model to neighbouring GM Authorities and alongside the knowledge and experience gained from this and other Open Data initiativesⁱⁱⁱ that we've been involved in; positions us well to take advantage of the additional opportunities for data exchange and data driven innovation that the Devolution may also bring to the region.

Further information:

Website: <https://www.salforddataquay.uk/>

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ⁱ <http://www.w3.org/DesignIssues/LinkedData.html>

ⁱⁱ EU directive and associated UK Regulations that demand that all public bodies publish any geographic information they manage that relates to a series of 34 environmental themes. The Directive sets out how the data should be published).

ⁱⁱⁱ GMDSP, Local Government Incentive Scheme and support for the Greater Manchester Infrastructure Map