is communications Ltd

Open City Data Workshop Report
12th January 2015

21c consultancy

Citadel ...on the move

About Us

Citadel on the Move is an EC-Funded initiative that has helped more than 20 UK Authorities and 125 global Cities to release Open Data and create simple, attractive apps

IS Communications is a company that specialises in how technology and the use of data can help neighbourhoods and cities work better

21c Consultancy is a specialist Open Data innovation firm with a world-leading track record helping government to open and use data to improve services, lower costs and work Smarter.

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This report provides insight into the current landscape and future direction of the Open City Data terrain in the UK. Specifically, the report examines a number of the challenges preventing UK Local Authorities from unlocking the benefits of Open Data as well as a number of practical solutions to address these challenges. The findings are drawn from a workshop run on 12th January 2015 in London, UK. The workshop brought together 22 participants from Local Government, Central Government and the Private Sector to share their experiences on the ground and suggest future directions. The workshop was organized by 21c Consultancy and IS Communications with the support of the British Standards Institute and the Citadel on the Move Project.

Summary of Key Findings

Open Data is a growing issue in the UK set to dominate the agendas of every local authority over the coming years.

In the face of further cuts to Local Authority Budgets, Open Data offers a unique opportunity to leverage untapped assets in transforming public service delivery

While pioneer Local Authorities have begun their Open Data journeys, most Councils still need more support to gain internal acceptance from the key personnel who can make a project successful
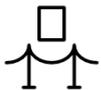
There is a lack of convincing case study resources on Open Data in the UK to underpin the Business Case for action

Staff in Local Authorities lack the training and understanding to tackle Open Data head on

National Government organizations need to take the lead in implementing training and guidance programmes to help Local Authorities succeed

While considerable work has been done to develop Open Data standards, many local authorities still lack an awareness of the landscape and best ways to proceed

Open Data can have many economic, operational and reputational benefits for Local Authorities, not all of which can be foreseen. The key is to get started and be ready to capture and promote success

What is Open City Data?

"Data of Use or Relevance to the City regardless of the source"

Open City Data is…

- ✓ **Always available for free**
  - ▪ Free both in cost to the end user and for the purpose they use it for
- ✓ **Publically-available to everyone**
  - ▪ Available with Open Licenses to stimulate reuse
- ✓ **Available in a machine-readable format**
  - ▪ Must be able to work with Apps & Services
- ✓ **Combined from a variety of sources**
  - ▪ Not just government data but also from industry, third sector and people
- ✓ **A way to be transparent & accountable to citizens**
  - ▪ Furthers political priority to be open and transparent with people
- ✓ **A means to redesign public services**
  - ▪ Information useful for planning and prioritisation
- ✓ **A way to promote economic growth**
  - ▪ Makes the local area a more attractive place for businesses and developers

Why is Open Data Important to You?

"Increases economic and social growth, improves transparency & makes Councils more efficient"

1. **Enhancing Government Reputation**
    - o "A way to widen and deepen our reputation as an Open Data Centre"
    - o "Furthers our political priority for transparency"
    - o "Promotes our city as an attractive place to do business"
    - o "Supplies reliable raw materials for Data Journalists"

2. **Improving Service Delivery**
    - o "Realise considerable efficiencies in how the Council undertakes its own work"
    - o "Allows redesign of public services"
    - o "Reduces time spent dealing with FoI requests"
    - o "Helps combine resources across departments"
    - o "Improves 'global' vision of local authority through shared data"
    - o "Guides environmental responses"

3. **Unlocking Economic & Social Value**
    - o "Enables new creativity"
    - o "Strengthens local digital infrastructure"
    - o "Generates local demand for Open Data"
    - o "Makes it easier for small cities to realise the value in their data"
    - o "Enables Open Data base layer for generating benefits"
    - o "Supports local research & intelligence"

What are the Key Open City Data Needs of UK Local Authorities?

Open City Data Key Needs

- Provide concrete Evidence & Case Studies
- Instill a culture of change in Local Authorities
- Prioritise Open Data on Local Authority Agendas
- Demonstrate saving offsets from efficiencies
- Capture data on potential benefits
- Access basic, get started guidance aimed at Local Authorities

Identifying the Benefits of Open City Data

Solving 'Wicked Problems' – Sedgemoor was able to use data to empower its citizens to apply for community mitigation projects, offsetting the impact of a new nuclear power station

Burden-Sharing - Leeds citizens expected their council to be aware of all art in the public realm. The council used local developers and created the opportunity to crowd source the information and release it as Open Data, better for both citizens and hard pressed staff.

Saving Time & Money for Staff – Catalonia opened their data as part of the INSPIRE directive. Within 6 months, the savings made by staff from different departments from having shared resources had offset the entire cost of the project

Reducing FoI Compliance Costs – Leeds has seen an overall year-on-year reduction of 5% in Freedom of Information requests after releasing key open datasets. Other councils have experienced a reduction of between 5 and 20 FoI requests per week

Empowering a Trial & Error Approach: Cambridgeshire found that administrators were much more willing to work with Open Data when they had the freedom not to have to do it perfectly first time

Harnessing Free Developments - London released Cycle Hire live feeds from TFL. In two days, two apps were developed, which have had millions of downloads

Leveraging Community Data Clean-Up – Leeds found that publishing the data allowed users to identify and report any errors and improvements, thus not only cleaning up the data but also stimulating engagement with the community.

Identifying Efficiencies – Leeds identified, following the publication of Business Rates as Open Data, a significant lost Rating income and is working with partners to address this.

Cutting Data Overheads – Land Registry found that it was more expensive to charge users for their data than the revenues generated. Open Data would have provided greater economic benefit with fewer costs

Boosting National Economy – South Korea recently invested $2.2 Billion into Open Data. The projected return is in excess of £22 Billion and 150,000 Jobs.

Open City Data in the UK: Challenges & Opportunities

Challenges

Internal Support   **Training & Skills**   **Community Engagement**

- **Internal Support**
  - **Most Work Under the Radar –** Many initiatives exist in isolation, meaning the potential benefits are not widely used by the Authority.
  - **Difficult to Communicate Work Internally –** Authorities struggle to effectively communicate Open Data to their colleagues and to bring key personnel on board with programmes
  - **Lack of Integration with Internal Processes –** Authorities are often failing to make Open Data part of the formal processes and priorities of their work
  - **Resistance to Publication –** Staff experienced significant resistance to publication from data owners. Common arguments include 'the data will make us look bad' and 'it has never been published before and this must be for a reason'.
  - **Perception of Open Data as a Threat –** Some staff see Open Data as a threat to their purpose and livelihood. Initiatives have a challenge overcoming such objections
  - **Open Data Projects not Synced to Local Authority Agenda –** Projects are sometimes established on their own with little reference to the priorities of the wider Authority. This separation creates challenges in gaining support among senior decision makers.

- **Knowledge & Skills**
  - **Lack of Technical Skills –** Many Authorities lack the resources to extract their prospective Open datasets from back-end systems - creating barrier to release.
  - **Scarcity of Compelling Business Cases –** There is a lack of hard, quantifiable evidence from case studies that can be used to convince senior staff of the need to commit to Open Data
  - **Lack of Clear Standards –** Staff often lack clear standards guidance on specific issues of data release making it difficult for them to make smart choices about formats and structure.

- **Community Engagement**
  - **Lack of External Stakeholder Involvement –** Open data projects can be inward looking, receiving little or no input from business or third sector stakeholders. This challenge can lead to projects that do not reflect the priorities of potential data re-users.
  - **Lack of Communication with the Community –** Open Data initiates are often poorly publicised to local people, creating a challenge of low interest or acceptance.

Opportunities

**Align Agendas**   **Train Staff**   **Engage Community**

- **Align Agendas**
  - **Use 'Wicked Problems' as a Catalyst for Release –** Solving a complex and important local issue can be an effective way to encourage Open Data. Pick a problem that matters to people and not only will the data be easier to get hold of, it will be much more widely used, because there is a pre-existing demand for information.
  - **Implement a Peer-to-Peer Information Sharing Process –** Open Data generates a wide range of efficiency benefits for different teams within an Authority. Teams need to know how they can access Open Data and what to expect.
  - **Demand Management –** Open Data can be used to make smarter decisions about providing services, particularly to vulnerable people
  - **Coordinated Projects –** Joined-up initiatives can often circumvent some governance mechanisms that currently stand in the way of data release.
  - **Instil a Culture of Public Sector Transformation –** Open Data offers the opportunity to create a culture of transformation within a Local Authority and to enlist the support of leaders, rather than being an isolated programme.
  - **Open Data Mandates for Procurement –** Use procurement procedures to make Open data a default assumption for new contracts.

- **Train Staff**
  - **Understanding and Addressing Valid Concerns –** Staff need to be empowered to understand legitimate concerns from their colleagues and have the arguments and tools at their disposal to help overcome resistance.
  - **Combine Technical & Partnership Expertise –** Local Authorities need to develop both 'convincers' to build partnerships within the Authority and technical capacity to execute an Open data programme.
  - **Create Targeted Training Resources –** There is an opportunity to create and promote targeted, on-the-ground training resources to build Local Authority Open Data skills.

- **Engage Community**
  - **Co-Production of Services –** Open Data offers the chance to engage industry, third sector and the general public in greater co-production of public services

- o **Relationship Management –** Open data offers the chance for local authorities to improve their relationship with local people
- o **Upfront Acknowledgement of Omitted Data –** Some datasets contain information that cannot be released. There is an opportunity to improve the partial release of this information by being honest and clear with users that data has been omitted and why.
- o **Greater Involvement by Business & Third Sector –** The involvement of external stakeholder offers the opportunity to increase both the provision of data held by these entities and their reuse of the resulting Open Data resources.
- o **Showcasing Success –** Often great programmes go unnoticed to the media and public. There is an opportunity to create new case studies and champion these to 'followers' within a Local Authority and across the UK.

Open Data: A Catalyst for Change

Open Data is not an isolated issue for Local Authorities. Opening data can also improve the performance of other areas of Local Authority operation. The participants found that two areas received a particularly positive impact from Open Data programmes:

1. Sharing data among different departments and agencies in the city to help support decision-making
2. Finding new ways to collect information like social feeds, sensor placement, or citizen-led monitoring
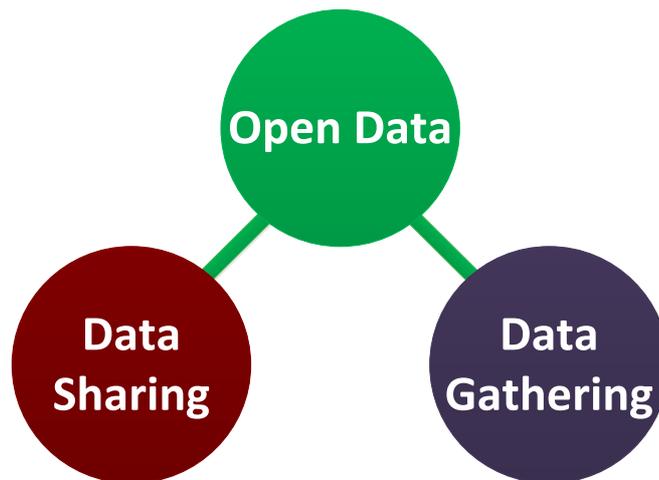
Data Sharing

Effective data sharing between Local Authority departments and agencies provides a richer picture for everyone. Data sharing also facilitates collaboration between departments in finding better solutions. However, many cultural and procedural barriers still prevent effective sharing.

Opening up data allows other departments and agencies access to information, while circumventing many of the challenges of internal channels. Departments which share information in this way have already begun to demonstrate the benefits. Cost reductions such as those achieved in Catalonia, where the reduction in staff time spent chasing inter-departmental data paid for the Open Data programme inside 6 months, are helping to strengthen the business case for Open Data.

Data Gathering

As more Local Authorities begin Open Data programmes, they have begun to examine how new sources of information from outside their control can help enrich their operations and deliver efficiency. From ideas of placing road quality sensors on refuse trucks to enlisting local people to monitor air quality, cities are now exploring the best way to make use of the wealth of data available to them. New trends like the use of anonymised mobile phone data are expanding this area, catalysed in large measure by Open Data programmes.

Next Steps for UK Open City Data

Training

- **Specialist Training Resources -** Local Authority non-technical staff often need on-the-ground training about how to develop pragmatic, compliant processes to deliver Open Data.
    - o **Local Open Data Manual –** The UK currently lacks a document, written for the lay person inside a Local Authority, which codifies standard approaches and available tools.

Standards

- **Shared Resource for Socially-Promoted Standards –** At present, standards are still largely built from the top down. Local authorities still lack a meeting point where standards can evolve naturally from on-the-ground practices. There should be an effort to create a definitive resource for Local Authorities seeking Standards Guidance.
    - o **Need for a Global Framework to Map Existing Standards and Point to Gaps –** Local Authorities and Standards bodies alike need a full 'architecture' of all the standards challenges encountered by Open Data initiatives. Such a model would allow a definitive reference to be kept of existing standards and identify gaps in the current provision.
    - o **Need for Effective Data Certificates –** Leeds found there was no common data certificate standard available and therefore created one. We need to find ways that city-level fixes like these can be used to reduce the burden for other Authorities encountering the same challenges.
    - o **Need for Online Community Space –** Local Authorities working in this area expressed a desire to provide advice to each other on which standards to use, particularly when there are several possible ones, and to work collaboratively to pilot and trial standardised approaches where there are none, in order to better enable standards to emerge from the ground up.

Communication

- **Greater Local-Level Communication on Open Data –** The Open Data User Group (ODUG) have evidenced from the community who have engaged with the Open Data agenda (over 13,500 people) > 9% of the Open Data requested to be released under their demand led initiatives, is at the local level. This has prompted further ODUG work to support Open Data for the local agenda.

Recommendations

Central Government Departments

- **Support the development and piloting of training courses** aimed at local government service managers to give them a hands-on experience of the value of open data and to alert them to the key issues and good practice on how to deal with them

- **Support the development of a 'Local Open Data Manual'** of resources for Local Authority service managers that will provide them with a clear route through the key issues and practical resources to help them through each step of the way

- **Promote the setting up of a national good practice resource** specifically focusing on capturing the quantifiable benefits of open city data

- **Support the setting up of a common online training resource** to be used to spread training on open city data more widely through each Local Authority

- **Facilitate the setting up of a collaborative website** for managers and technical staff in Local Authorities to encourage peer support and enable better collaboration to tackle the common issues that they face in order to help build consensus around the development of any new standards that prove necessary

- **Further National Support for Open Data Programmes** – Guidance like the INSPIRE directive has acted as a catalyst for smaller 'follower' Authorities to begin addressing Open Data readiness. Further, well-targeted national guidance can help to build on this momentum

- **Definitive National Government Terminologies** – Different Local Government Bodies like DCLG, LGA and DWP have differing terminologies. This difference creates an inconsistency in the open data standards landscape that poses a problem to cities. Work needs to be done to encourage the adoption of common terminology schemas.

Local Government

- **Maintain the momentum of INSPIRE -** Many Local Authorities have poorly maintained information asset registers. The INSPIRE directive catalysed a first step toward getting this in order. Now Authorities need to continue this positive direction of travel to prepare for release

- **Allocate sufficient resources** - Given the importance of open city data and the potential that it has to help Local Authorities to deliver services more cost effectively and build stronger engagement with citizens, local government should invest the resources needed to allow them to get started in the process.

- **Support training of service managers** - Recognize that open city data initiatives need to be driven by service managers, rather than IT experts, and provide service managers with the support and encouragement to start to drive this forward, including finding the resources to provide them with training to gain the expertise they need

- **Partner with neighbouring authorities** - Recognise the importance of working with neighbouring authorities on Open Data, especially given that many residents work, shop and engage in leisure activities across neighbouring boroughs. Collaborative working between Local Authorities will likewise enable peer-support systems to be set up to tackle common problems together and ultimately help to drive standards.

- **Measure quantifiable benefits** - Ensure that the quantifiable benefits of open data initiatives are measured, monitored and shared with staff, stakeholders, citizens and other Local Authorities. Doing so will enable Local Authorities to demonstrate the value of open city data and so encourage every relevant department and agency within the city to open up their own data and contribute to the development of national good practice.
- **Focus on Most Valuable Datasets -** Key central government priorities for local Open Data often include topics such as Public Conveniences, Planning and Licensing. However, many local authorities have found that it is more valuable to focus on those datasets that are subject to the most Freedom of Information requests because of the savings this can generate for the council. Channelling Local Authorities toward their local 'quick win' topics can create increased positive impacts in a shorter timeframe.
- **Concentrate on 'Human' Projects -** Local Open Data projects need to focus on People, Place and Business rather than Data & ICT
- **Encourage Rich, Diverse Data Sources –** There is a clear need to focus not just on the data held by the Local Authority but also on combining this with data from other sources, such as from industry and the third sector. Leading actors like Leeds have the stated ambition of becoming the minority publisher on their own platform. This type of diversity should be promoted broadly
- **Communicate Faster with Affected Teams –** Many Open Data projects generate findings which can have a positive impact on the operation of different teams within an Authority. There is a need to strengthen feedback loops to ensure these benefits are getting through
- **Promote 'Geographic Searching' for Open Data -** Leading Authorities like Leeds and London are beginning to review the additional benefits of 'hyper-local data' regarding what happens at the community or street level. This could be reinforced through the provision of better tools to help make data easier to search using geographic parameters.
- **Generate More Data Services & Visualisations –** Although 'leader' Authorities are starting to release some, more visualisations are needed to make data accessible to the average user

Support Agencies

- **Help pointing to useful resources** – Support agencies should help to identify and gather relevant material for a UK Local Open Data Manual and Local Authority training programme
- **Help identifying relevant standards and good practice -** Support agencies are often experts in the standards and good practice landscape and can provide help and guidance in this area to local authorities
- **Standards bodies should be led by Local Authority experience -** As Local Authorities work together to develop and pilot standardised approaches, standards bodies should build on this experience to help build standards that reflect ground up experience and best practice.