

Make it local Scotland



Nesta...

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1.0 Introduction

Make it Local Scotland is a programme developed by the innovation charity Nesta during 2011 and 2012 which aimed to encourage collaboration between local authorities and digital media developers to provide innovative, web-based or mobile services for their communities making use of the data held by the local authority.

Scottish councils were invited to submit ideas which would offer residents and/or visitors a practical service using the data sets which would be opened up by the local authorities.

Importantly the councils had to commit to the principle of 'open' – the data sets would be opened, the code would be shared so it could be reused by others and the services had to be interactive so that content could be directly uploaded by users. As such, this differs from normal web or app development.

1.1 Introduction

Four proposals were chosen and each received £25,000 to develop their digital services.

They were:



- **Aberdeen City Council & Aberdeenshire Council** for a digital service to help residents in Aberdeenshire to share local travel information;



- **The City of Edinburgh Council** for a web service which enables residents and visitors to get the most out of Edinburgh's local parks;



- **Glasgow City Council** for a website which shows information on real time road and pavement gritting;



- **Orkney Islands Council** for a digital service which enables users to explore and learn about the archaeological sites in the Orkneys.

Our hope is that these projects may be informative to other local authorities and organisations who may wish to emulate or learn from them. The digital frameworks (the code which underpins the sites) and content (data) of all the sites have been made freely available on www.github.com and www.europecommons.org

2.0 Context

The ubiquity of data

Data has always been powerful – particularly when set free. In 1864 the physician Dr John Snow made history by tracing the source of a cholera outbreak to a Soho water pump by mapping all the infection cases on a map. Many centuries before that, the rulers of 11th century England gathered unprecedented amounts of information on the lands and livestock of feudal barons, later to be compiled in the momentous Domesday book and used to determine tax rates.

However, it is only recently that information has become truly 'big'. Around 1,200 exabytes of digital data are generated every year, and this is set to grow by 60 per cent per annum.¹ 90 per cent of the world's data has been generated over the past 2 years.²

The source of this boom can be traced to the advent of the internet and the continuous improvements in processing power and data storage.

These technologies have enabled data to be collected easily, stored cheaply and disseminated widely – whether that is information on a home's energy usage, a city's traffic jams, a neighbourhood's recycling figures or a school's performance results. Thus data is all around us; we just need to determine how to make use of it.

1 NESTA (2010) Big Data: The power and possibilities of big data. London: NESTA

2 See: - <http://www.sciencedaily.com/releases/2013/05/130522085217.html>

2.1 Context

The promise of open data

Perhaps unsurprisingly it is the private sector that has done most to harness the power of data. Reward cards have been used for many years by supermarkets to collect information on the spending patterns of individual consumers. Likewise, internet browsers have routinely logged users' movements and used them to tailor advertisements that are most likely to capture an individual's attention. So lucrative is the use of data by private organisations that McKinsey estimate it could improve operating margins by over 60 per cent.³

Yet the benefits of data are not limited to the private sphere. Local authorities, public services and civil society have just as much to gain, especially if that data is made 'open' and freely available for anyone to use.

Public sector datasets are already being analysed to identify efficiency savings and potential improvements in the quality of services. Last year, for instance, the tech start-up Mastodon in partnership with the medical activist Ben Goldacre identified £200m worth of potential savings in statin prescriptions by crunching available data on GP expenditure.⁴

³ McKinsey (2011) Big Data: The next frontier for innovation, competition and productivity.

⁴ See The Economist (2012) Beggar Thy Neighbour [Article], 8th December 2012. www.prescribinganalytics.com

2.1 Context

Similarly, a study by the Society for Cardiothoracic Surgery suggested that mortality in coronary artery surgery had fallen by a fifth as a result of public reporting of individual surgeon outcomes.⁵ Cities and local authorities are also feeling the benefits. In New York datasets from 19 different agencies including the police and buildings teams were combined to help identify places that had been illegally converted into residential properties. The result was a sharp increase in the number of eviction issues ordered and a fivefold increase in efficiency.⁶

UK Government departmental spending is set to fall by nearly 19 percent in real terms between 2010-11 and 2017-18, while the budgets of local authorities are being cut by a third over the spending review period.⁷

Against this backdrop it is vital that the public sector makes greater use of their available assets, not least the immense amount of latent data at their disposal. HMRC, for example, is reported to have more than 80 times the amount of data held by the British Library.⁸

Yet the promise of open data goes beyond the identification of efficiency savings. Its value also lies in improving accountability and legitimacy among decision-makers. Indeed, one of the first uses of open data was to hold to account people in positions of power. Two prominent examples are TheyWorkForYou and WhatDoTheyKnow; apps that use government data to keep voters abreast of their MPs activities.⁹

Perhaps even more powerful, however, is the potential for open data to be used to enhance people's decision-making – whether that be in finding out the best schools to send their children, identifying the most efficient transport routes to and from work, or deciding which neighbourhood is the safest to live in.

⁵ See The Daily Telegraph (2009) Death rate among heart surgery patients is falling. [Article], 30th July 2009.

⁶ Fox, M. S. (2013) City Data: Big, Open and Linked [Working paper] University of Toronto.

⁷ Johnson, P. (2012) Time for a Plan C? Slow growth and fiscal choices. London: RSA.

⁸ Pollock, I. (2011) On the trail of the offshore tax dodgers [Article], 13th December 2011, cited in Yiu, C. (2012) The Big Data Opportunity: Making government faster, smarter and more personal. London: Policy Exchange.

⁹ See <http://www.mysociety.org/>

2.2 Context

Building the infrastructure

With the benefits of open data well documented, it is little surprise that the UK Government has placed it high on its agenda. Early on in their tenure the Coalition promised to 'set government data free' and 'extend transparency to every area of public life', with one of their first actions being to release information on every expenditure over £500 in local authorities.¹⁰ Since then it has made an increasing amount of data available on the data.gov.uk website, which now contains over 17,000 datasets.¹¹ Moreover, several datasets that were once charged for have since been made free, including large amounts of the vital Ordnance Survey map data.

Many UK government departments have gone one step further by creating their own data-crunching platforms. The Department for Communities and Local Government created a local authority dashboard to visualise information about places across the UK, including on wellbeing, deprivation and obesity levels.¹² Likewise, the Department for Education launched a School Tool to help parents track educational performance, while the Home Office built police.uk to show details of criminal incidents at a hyperlocal level.¹³

The Open Data White Paper launched last year sets out plans to build on these initial efforts, including by working towards the Open Data Certificate of organisational best practice.¹⁴

Many local authorities have also created their own platforms. Lambeth in Numbers, the London Datastore and Open Glasgow are all platforms that enable residents to find and use data sets about their local area, including about free school meals, tourism, health, housing and land use.

Independent initiatives have also arisen to complement these efforts. Foremost among these is the Open Data Institute (ODI), which was launched in 2012 by Sir Tim Berners-Lee to raise awareness of open data and champion its use beyond the technology community.¹⁵

¹⁰ HM Government (2010) The Coalition: Our programme for government. London: Cabinet Office.

¹¹ See <http://www.mysociety.org/>

¹² See <http://opendatacommunities.org/dashboard>

¹³ <http://www.police.uk/>

¹⁴ HM Government (2012) Open Data White Paper: Unleashing the potential. London: Cabinet Office.

¹⁵ See <http://theodi.org/>

2.3 Context

Barriers to progress

However, for all the progress that has been made in recent years there are several barriers that prevent the potential of open data being fully realised. One of these is the supply of open data. Despite adding reams of new datasets online, unlike the US there is no public commitment to making data available by default. Instead it has been common to drip-feed information dataset by dataset. This is particularly true of local authorities, many of which lack the urgency that central government has shown. It was recently revealed, for instance, that one in four councils in England are at least four months behind in publicising information about their expenditure.¹⁶

Moreover, the data that is available can often be difficult to compare. Many local authorities have developed their own measures of performance and user satisfaction, making benchmarking a challenge. Similarly, each devolved government has its own way of collecting and distributing data, with four separate statistics bodies in place across the UK.

To confuse matters further, an increasing number of public services such as employment support and education are being run by voluntary and private organisations, which are not always bound to release information about their activities.¹⁷

This in turn has led to concerns over privacy and the protection of sensitive information. The very term 'data' has become synonymous with surreptitious activities, evoking images of WikiLeaks, lost USB sticks on trains and GCHQ encroachment in the minutiae of our lives.

¹⁶ Evening Standard (2014) Councils 'fail on data publication' [Article], 3rd February 2014.

¹⁷ Deloitte (2011) Deloitte Analytics – Insights on tap: Improving public services through data analytics.

2.3 Context

A poll by Ipsos MORI found that close to 60 per cent of people lack confidence in companies and public bodies to keep their data secure.¹⁸

This has been demonstrated most recently in the furore surrounding plans to collect and store data from GPs surgeries in one place, with 4 in 10 GPs threatening to withhold their patients' data for fear of its misuse.¹⁹

Yet perhaps the biggest barrier to realising the potential of open data lies less in how it is supplied (and stored) and more in whether there is actually demand for it from users. To date the biggest consumers of open data – at least in its most raw form – have been journalists and tech experts. A study by the National Audit Office in 2012 reported that very few people look at the data the government produces.²⁰

For example, they reported that page views for transparency data on the Ministry of Justice website accounted for just 0.02 percent of overall traffic.

Part of the reason is because data is often 'chucked' onto these platforms in an unusable format. The COINs system created in 2010 has been singled out as a particularly bad example of an unwieldy data storage system. But a broader problem is the low level of awareness among the general public about what open data is and how it can be useful. The same Ipsos MORI study found that two in three people don't feel informed about what information public services hold about them, and 74 per cent don't know how to find out.²¹

¹⁸ Ipsos MORI (2012) *Understanding Society: Evolving public services, evolving public opinion*. London: Ipsos MORI.

¹⁹ See Praities, N. (2014) *Over 40% of GPs intend to opt themselves out of care.data scheme* [article], 24th January 2014

²⁰ National Audit Office (2012) *Cross-government review: Implementing strategy*. London: NAO

²¹ Ipsos MORI (2012) *Op cit*.

2.4 Context

What does the future hold?

None of this of course is to deny the significant impact that open data has made on people's lives. It is only in its infancy, and many of the aforementioned drawbacks are likely to be ironed out over time. Some of the most forward-thinking organisations and local authorities have already taken steps to address these obstacles. Councils around Sheffield have decided to work together to align their data collection and analysis activities; Open Glasgow is creating an 'open dashboard' to create a personal live-time snapshot of Glasgow for citizens and visitors; and the Open Data Institute continues to run events and training sessions to support open data initiatives and understanding with a wider audience.

Time will tell whether such schemes are successful. However it is only through experimentation and the trialing of new initiatives that we can learn how to make best use of open data. Indeed, this is crucial given how quickly the technological landscape is expected to change over the coming years. New opportunities will emerge that mean the public sector must continue to challenge and change existing ways of working.

We know, for instance, that the amount of public sector data made available is likely to continue to grow, but so too will the creation of that data. The emergence of the 'Internet of Things' (everyday products connected to the internet) means it will be feasible to collect data in real time, as is increasingly the case in the US. San Francisco, for example, launched the SFPark app, which draws on data from sensors in 7,000 metered car park spaces to show which are currently available.²² Another example is Where's My School Bus?, an app that can be used by students and their parents in Boston to track the location of their bus in real time.²³

²² See <http://sfpark.org/>

²³ See <http://schoolbus.bostonpublicschools.org/>

2.4 Context

We may also see more people tracking their own personal data, along the lines of the Quantified-Self Movement currently popular among many health and fitness enthusiasts. One of the most prominent examples is Mappiness, an app developed by researchers at the London School of Economics that enables people to track their happiness and find out when, where and with whom they are most happy.²⁴

The data collected is useful both to the user and the research team. This may prove a more innovative way for public sector organisations to capture and promote the use of data than relying on existing datasets, some of which are years out of date.

The digital services developed through the Make It Local Scotland programme already show innovative uses of data capture, storage and distribution that may be common place in years to come. What follows is a description as to why and how these were developed, some of the challenges involved in their realisation and their perceived impact and benefits to date.

²⁴ See <http://www.mappiness.org.uk/>

3.0 Edinburgh Outdoors

Edinburgh Outdoors is a website and mobile app which allows local residents and visitors to discover and get the most enjoyment out of Edinburgh's parks and green spaces. It contains information on the parks' historic monuments, trees, wildlife, play areas, and toilets as well as details on forthcoming events and suggestions for activities. Users can add their own images, make comments and report any issues about the parks. Edinburgh Outdoors was created by Edinburgh City Council with digital developer James Baster and the design agency Eskimo.



The Council held a number of ideas workshops with the local community and also considered the priorities identified in its own strategy and how a new online service might help deliver these.

It decided to focus on the city's parks and green spaces as the City Council wanted to enable residents and visitors to get more out of their visits to Edinburgh's parks and also wanted to encourage visits to those that are lesser known.

3.1 Edinburgh Outdoors

Making It Happen

A small project team came together from across the Council led by its web manager and included the Parks Department; the Libraries division which provided heritage and contemporary images from their collections; a Customer Experience Manager who tested the content with the local community; a Senior Communications Officer who was responsible for promoting the service; an external developer who won the tender to develop the site; and an agency, Eskimo, which was responsible for creating the site's design. The Council provided the various officers' time in-kind but nobody was working on the project full-time and everyone had to juggle other responsibilities around it.

The project started with quite low expectations with some of the people in the team envisaging that they would only get information about six or seven parks uploaded onto the site for its launch. This was, in part, because quite a number had never done anything similar before and they were unsure how long some aspects might take.

The original timescale for the project – six months from concept to delivery was one of the greatest challenges meaning that the group had to form a team and work out roles and responsibilities rapidly.



3.2 Edinburgh Outdoors

“We have to get a quite diverse group of people to work together over short timescales. They had to bond very quickly.”

Edinburgh Outdoors
Project Lead



Having developed some design concepts, the authority published these online and invited residents to give their views through questionnaires and focus group discussions. Quite a few parks in Edinburgh have friends groups and the Council also went out and consulted with some of these.

By the time Edinburgh Outdoors was launched there were **143 parks** and open spaces on the site with descriptions of all the monuments contained within them. The Council was fortunate to have access to a collection of old images of Edinburgh’s parks and so was able to include some of these alongside contemporary ones and this feature proved very popular with users.

The Council put an estimated **£10,000** additional funding into the project primarily for app development but also for additional marketing of the site. Promotional activities included use of social media and publicising the app at events such as the Royal Highland Show. However, the organisers feel that the initiative could have benefited from a more sustained marketing campaign. The ongoing costs for the service – essentially support and maintenance - is estimated to be around **£3,000 a year**.

3.3 Edinburgh Outdoors

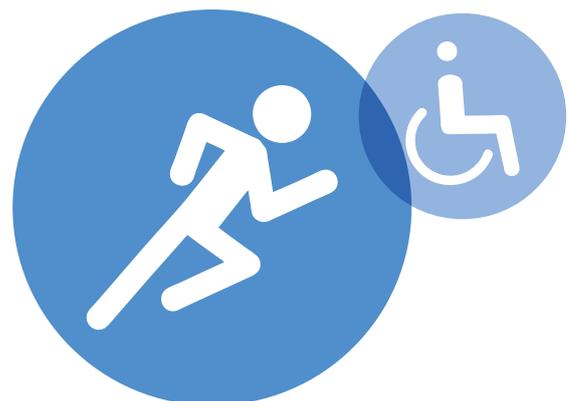
Future development of the service

The current aspiration is to build a larger platform for Edinburgh Outdoors which incorporates additional features such as possibly having information for runners about potential training routes through the city's parks and a feature for people who are in wheelchairs to find accessible routes on flat terrain. However, the organisers are keen to ensure that the app doesn't become so busy that it appears unwieldy or difficult to use.

Edinburgh Outdoors has also made the Council consider the potential for an app which brings together a whole range of information about the city, not just its parks.

Impact and Benefits

- There have been almost 46,000 individual page views since the launch of Edinburgh Outdoors around a quarter of which have been from mobile devices. There have been more than 1,000 Android and iPhone downloads. Edinburgh Outdoors has more than 1,750 Twitter followers and its Facebook page has almost 500 'likes'.
- The project has been popular with both residents and visitors enabling individuals to get more out of the parks and thereby increasing their enjoyment of them. Teachers, for example, have found Edinburgh Outdoors a valuable way to enhance their children's experience of the city's parks by using the app to share information with them and to use as a stimulus for biodiversity learning projects.
- Some of the staff of the Parks Department are now, as a result of the project, much more conversant with social media and are using it to promote activities available in the city's open spaces. Tree surgeons employed by the Council have used the app to communicate what they do and why and have found this useful to counter misunderstandings about their work.



3.3 Edinburgh Outdoors

Impact and Benefits

- The project has been very effective within the local authority to demonstrate the potential of open data. It has had a significant influence on the way that open data has been viewed in the Council and the opportunities that it presents. The local authority now has a new ICT and Digital strategy, and has created a new post, Digital Services Manager, which includes innovation and open data in the job description. It is currently formulating an open data strategy and plans to carry out a number of small demonstrator projects which will be fairly easy to deliver and can show measurable benefits. With this in mind, the Council is also looking at the potential for working on projects with local universities in which students will be encouraged to mash up data sets and see what can be created as a result. It is also likely to run a series of hack events to stimulate and inspire usage of open data.
- Edinburgh Outdoors was shortlisted for a Eurocities Award which showcases outstanding achievements by member cities in the delivery of local activities which improve the quality of life for citizens.
- The Council has been asked to speak at a number of events and conferences about the project and thereby raised its profile. The organisers believe that the project has also helped perceptions of the Council by local digital developers and this may facilitate collaborations with Edinburgh's developer community in the future.
- The source code for Edinburgh Outdoors has already been taken for another project involving the Edinburgh International Science Festival. The festival organisers added several new features, which have also been folded back into the Open Source code base.

“For me it was a case study that we could say ‘and this is what you can do’ so that when I am trying to make an argument for opening up data easily, I can say that these are the things people did using our data.”

Edinburgh Outdoors
Project Lead

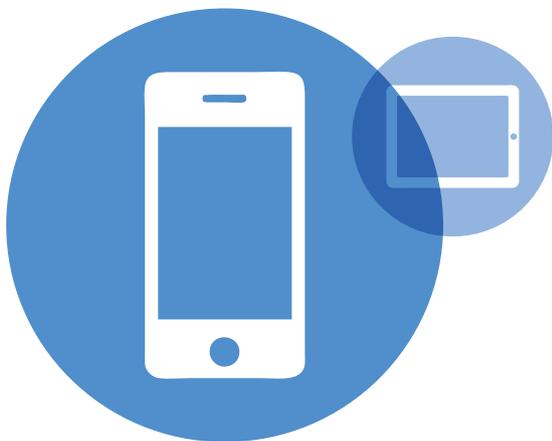
3.3 Edinburgh Outdoors

Tips from the organisers for others:

- Being able to cite how Edinburgh Outdoors was meeting some of the local authority's strategic objectives was found to be useful in getting buy-in from senior managers in the Council for the concept.
- It is worthwhile considering if an app can incorporate a feature which users will find especially useful and which might drive traffic to the site.

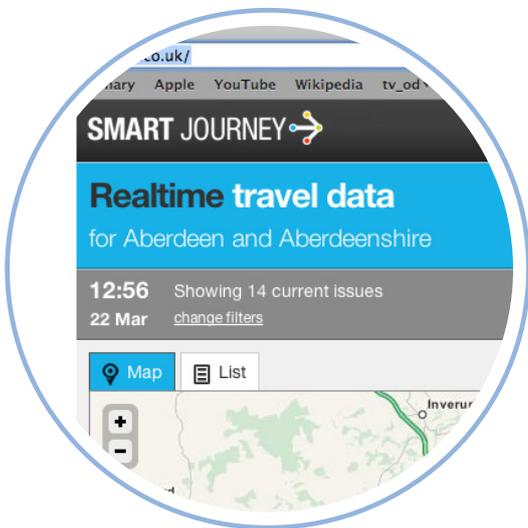
“You need something that people need to use, not just want to. If we could work out how to get the bus routes for parks on the app, we think that would increase usage because people are always using that app.”

Edinburgh Outdoors
Project Lead



4.0 Smart Journey

Smart Journey is a mobile-friendly website to enable the community in Aberdeen City and neighbouring Aberdeenshire to share and discover up-to-date local travel information. It includes information on road conditions, disruptions and current and planned road works - and also allows citizens to provide their own live updates.



Smart Journey is a joint project between Aberdeen City Council and Aberdeenshire Council. The digital agency which helped realise the project was Swirrl IT with assistance from Lighthouse design.



4.1 Smart Journey

How it came about

A significant proportion of people commute from Aberdeenshire into the city every day, principally for work but also for leisure and the Council found that a very significant proportion of feedback on its social media was about problems with roads and traffic.

Although there were various sources of travel information available, a user would have to go to a number of different places and so it was decided to bring this information together into a single service which would work effectively on a mobile.

It was considered crucial that people should be able to contribute to it by informing other road users about any problems, tailbacks, accidents and roadworks which they have encountered or are currently experiencing. The intention was also that the facility would provide a source of information for the two local authorities to monitor problems and where appropriate, take action.



4.2 Smart Journey

Making it happen

The project was led by Aberdeen City Council's e-Government Manager and involved the GIS team, the roads division and marketing department.

The project lead estimates that he spent some 160 hours on the initiative and was in a fortunate position that he managed a lot of the resources needed to deliver the project.

Originally it was envisaged that the site would contain general travel information along with weather updates but in the end it was decided to focus just on roads to ensure the service was delivered on time.



4.3 Smart Journey

“Weather became just another thing that disrupted travel so we didn’t see the need to have a sort of weather portal mixed in with it but simply to reflect what the road conditions were... We thought about trying to integrate more data on public transport in terms of buses and trains, and that could still grow out of it at some point, but the scope had to be manageable and deliverable.”

Smart Journey
Project Lead

The main challenges which the organising team encountered were technical and creating the open data to drive the service from previously closed data sets. The agency which was selected for the scheme, Swirrl IT, was able to overcome these difficulties and brought valuable prior experience of delivering other linked data projects.

A lot of effort was put into publicising the service including the use of press and radio promotions and adverts on the nozzles of pumps at petrol stations.

This was quite successful in raising awareness of Smart Journey but an ongoing challenge has been encouraging people to put up their own travel reports.

4.2 Smart Journey

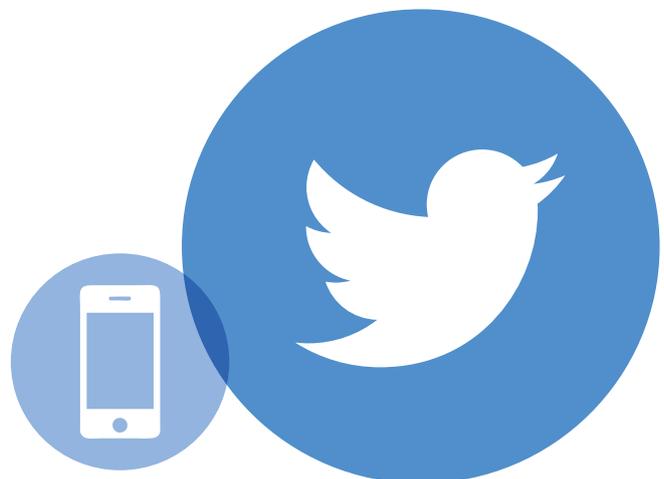
Future development

In the short term, the organisers intend to do some more promotion of the service, particularly to encourage users to send in their reports.

One feature being considered is a deeper integration of social media so that a Twitter user could, for example, sign-in through Twitter and then when reporting a problem would have this information entered onto Smart Journey and also have it 'tweeted' out simultaneously.

Although it would be a fairly considerable undertaking, the organisers see the potential in having a Scotland-wide version of the service.

Such a facility would mean that someone making a journey from Aberdeen to Dundee would avoid having to visit four separate local authority travel portals. Aberdeen City Council welcomes interest from other local authorities which might be interested in collaborating on this venture.



4.2 Smart Journey

Impact and benefits

- Smart Journey has taken information which was previously available and made it both more visible and more accessible. In 2013, there were 21,798 visits to Smart Journey and 14,756 unique visitors. It has almost 500 registered users and 1,122 reports have been submitted.
- The project brought two local authorities together and though they had collaborated on small initiatives in the past, this was a more significant undertaking and has made them consider how else they might work together in the future.
- Smart Journey has enabled the local authorities to automate a process (announcing road closures) which previously had to be done manually. This means that information can now be released more rapidly and more efficiently and with the user-generated content, the information is much richer and up to the minute as a result.

“A roads engineer would put in what we call a traffic notice to say that on Wednesday 2nd April somebody will be digging up the A90 at this location and it will affect these places, and give a description of it. That will all have been done manually in Word documents and then it would have been sent to the press as a news release, and it would have been sent to councillors whose wards are affected and other community people.

We scrapped that and wrote a simple system so that they go into the system, they log on, it generates the press release, it emails the councillors but it also updates Smart Journey at the same time. Not a huge development but that really made such a difference... It meant that information was flowing better.”

Smart Journey
Project Lead

4.2 Smart Journey

Impact and benefits

- There has been interest from other Councils in Scotland and the organisers also believe that it has helped how the Council is perceived in the local community:
- There is still a largely untapped opportunity for community groups to take relevant data from Smart Journey and repurpose it for their local area. The project lead cites the example that just prior to the launch of Smart Journey, he got into a conversation with a local digital developer who built a smartphone app for Aberdeen City in his spare time which gives information about the locale and what is happening in different parts of the city. The developer took the open data and rewrote it so that as soon someone puts in a report of problem into Smart Journey it appears on the handsets of people in whose location it is happening.

“I think if you are prepared to stick your neck out and try things, if you’re successful, then it brings positive attention which then gives you other opportunities... There’s a benefit not just for me and the team but the Council as well in terms of showing that we can actually do something a bit more exciting and innovative.”

Smart Journey
Project Lead

Tips from the organisers for others

- Having a project management methodology through which the organisation could control the project was crucial so that the scheme remained on time and on budget. It was also important to be explicit about what the project deliverables will be.
- Choosing the developer carefully and taking steps to understand what they do and what they can deliver meant taking the time to look at their track record, at their recommendations, and examples of other work they have done.

5.0 Glasgow Gritting

The main routes in Glasgow get gritted from around September until April each year. Glasgow Gritting is a website which offers live information on road and pavement gritting services throughout the city during the autumn and winter period. The service shows which routes have been gritted, when a street was last treated and gives information on priority gritting routes using real-time data from GPS tracking equipment on gritting vehicles. It was developed by Glasgow City Council and IRISS (Institute for Research and Innovation in Social Service).



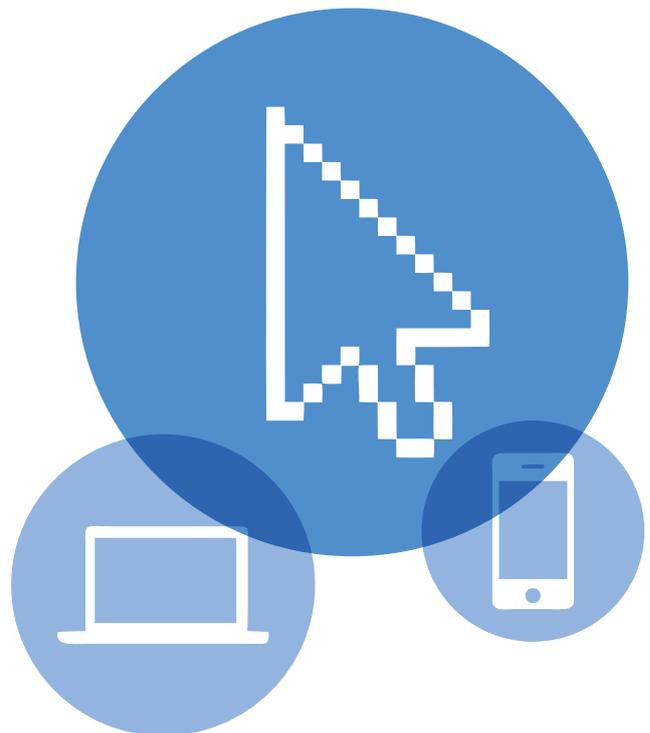
[\(http://gccgritting.iriss.org.uk/\)](http://gccgritting.iriss.org.uk/)

5.1 Glasgow Gritting

How it came about

The Council announced on its website and through its social media channels that it was intending to release some of its data and invited suggestions from the public about what sort of data they would like to see opened up. At the same time, it put out a call for digital agencies to get in touch if they might be interested in partnering on the project – this was a different procurement process for the local authority which the Nesta grant made possible.

The announcement went out during what was a severe winter and so unsurprisingly gritting was a popular theme in the responses received. As the Council had access to data on roads which had been gritted from the **243 vehicles** which go out and do the gritting, it chose gritting as the focus for the development of a new digital service.



5.2 Glasgow Gritting

Making it Happen

The project was led by the Council's Corporate Services team in collaboration with its Land and Environmental Services Division with input from its internal marketing team. Consultations on the project and what it aimed to achieve took place through two of the local authority's community councils and demonstrated a demand for it.

Originally, the Council had hoped to show on a map on Glasgow Gritting where the gritting lorry was in real time but for security and other reasons this feature was not included. A link to "Find my nearest" was included on the site. This is a website through which a resident can put in their street name or postcode and then find their nearest schools, GP, parks, salt and grit bins etc.

The service was communicated through articles in local media including the City Council's own magazine which goes out to **250,000 residents** in the city. The Council also took out some print and radio advertisements and publicised the Glasgow Gritting on its social media outlets (**it has about 40,000 followers on Twitter**) which proved to be the most effective marketing tool.

5.3 Glasgow Gritting

Future Development

The site is moving from IRISS's servers to those of Glasgow City Council. The local authority plans to continue to monitor usage of Glasgow Gritting and test some new ways to market the service to the local community and gauge their reactions to it.

In 2013 Glasgow City Council won a £24 million Future Cities competition to showcase how it can grow its local economy and improve the lives of its citizens by making the most of new technologies and by integrating and connecting city systems.

The competition, managed and funded by the government's innovation agency, the Technology Strategy Board, saw Glasgow secure this funding in an open competition against 30 other UK cities. Led by the Council in partnership with key public, private and academic organisation including the University of Strathclyde, its programme will be run over an 18 month period.

As part of Future Cities, the local authority has launched a portal, Glasgow Data (<http://data.glasgow.gov.uk/about>), where data sets covering transport, education, environment and health are being made freely available. Data sets recently made available include ones on allotments, cycle routes, rivers, household composition, hospital admissions, and air quality.

This year the authority also intends to open up its existing Freedom of Information data. The purpose of this is in part to be more transparent but also the authority has found that a lot of the requests it gets are of a similar nature and making this information readily available might avoid this duplication.

5.4 Glasgow Gritting

Impact and benefits

- Unsurprisingly, the usage of the site varies significantly according to the weather. At the time of writing in January 2014, there has been an unusually mild winter and so usage has been limited. Since the launch of Glasgow Gritting it has had almost 10,000 page views with about 6,000 user sessions.
- One of the benefits from the site has been a decrease in the number of telephone calls from the public to the Council asking about which streets have been gritted. Responding to such calls can be time-consuming and thereby costly.
- Whilst the website was for the entire local community, a particular beneficiary has been the Council's Home Helps. Glasgow has some 4,000 Home Helps and quite often in the winter they are unable to get to their clients to see them because the roads are in such a bad condition. The Council has been able to use the site to show which roads have been gritted so that the workers can find possible alternative routes.
- Similar to most of the other Make it Local projects, there was also a perception benefit for the Council:

"It's not always apparent that a street has been gritted when you're in a house. So people were phoning up our call centre to ask that question. The call centre operatives would find that a really difficult question to answer before the website came along. They would have to phone the depot and ask the supervisor if the street had been gritted. All they have to do now is look on the map, put the postcode in and you've got it there."

Glasgow Gritting
Project Lead

"I think it looks a little bit trendy as an organisation to do something like that which is not normally associated with the Council, that kind of idea innovation."

Glasgow Gritting
Project Lead

5.4 Glasgow Gritting

Impact and benefits

- The project acted as an important catalyst in terms of opening up data and the authority is now opening up different data sets with the aim of enabling individuals, SMEs and corporates to use this data to create practical improvements.

“I think the idea of opening up data was one of the key benefits for us. There are huge numbers of datasets in the Council that just never see the light of day... For example, customer complaints: How many do we get? How long does it take us to deal with them? Do we resolve them? People are always interested in that kind of thing.”

Glasgow Gritting
Project Lead

5.5 Glasgow Gritting

Tips from the organisers for others

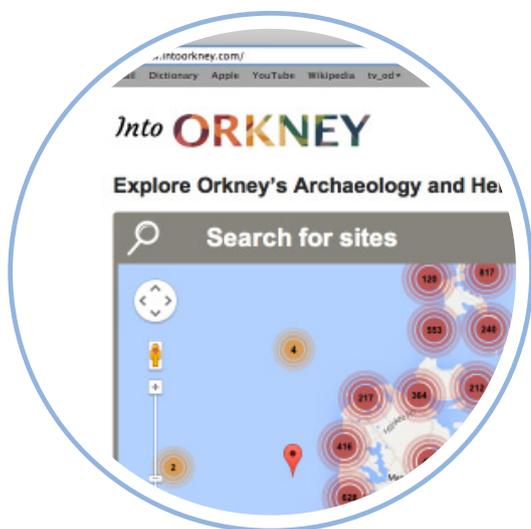
- Having a fairly tight focus was found to be particularly beneficial for Glasgow Gritting and enabled it to be delivered close to the intended launch.
- Working with a not-for-profit agency on a project of this nature was useful as they were flexible and were able to accommodate the challenges of an innovative and dynamic scheme.

“The scope creep on these things is incredible – or can be. Ours was quite tightly focussed. We could have made it wider but we decided not to. I would suggest if someone was looking to do a similar project, pick something that is do-able but also keep the scope fairly tight.”

Glasgow Gritting
Project Lead

6.0 Into Orkney

Orkney has a large number of archaeology sites varying from the world famous (and World Heritage inscribed) sites such as Maeshowe or Skara Brae, to spots where once a flint was found, or an interesting stone ploughed up. Into Orkney brings together data about archaeological sites and monuments on the Orkney Islands, allowing users to explore and learn about the Islands' heritage on a 'phone friendly' website.



The interactive service also enables users to add data such as sound files of place-names, photographic records, and updates on key monuments which are at risk from coastal erosion.

It was developed by the Archaeology Service of Orkney Islands Council in partnership with the digital agency Copla and the Royal Commission on the Ancient and Historic Monuments in Scotland which made its records freely available for the project.



6.1 Into Orkney

How it came about

Every known archaeological site in Scotland has an individual number through which the site's location and history can be sourced but this information was not readily accessible meaning that an individual would have to go home, try and recall where he/she was that day and then look it up on a map.

The organisers wanted to create a service for residents or visitors to the Orkney Islands so that when they come across a historic place or monument, they can search for it on their mobile phone and learn about its history whilst they are still present at the site.

Orkney has a thousand miles of coast and about a third of its archaeological sites are located on it. Many are getting badly damaged by the sea and this represents a significant loss of heritage. The organisers wanted to use Into Orkney to encourage people to report any coastal erosion to specific sites that they are aware of as the Council's capacity to monitor such a significant number of sites over such a wide area is extremely limited.

They also wanted to give communities the opportunity to contribute to Orkney's historical records by providing a central place for them to record their own photos and descriptions of sites and also to be able to upload their own audio tags with the correct pronunciation of a place name in Orcadian.

6.2 Into Orkney

Making it happen

Each site included on Into Orkney has a link to Canmore which is an online database of Scotland's buildings, archaeology and industry. The site combines this information with two different satellite images – those of Google Earth and Bing – together with photos and also occasionally with YouTube video clips.

The site includes the facility for individuals to upload a sound file giving the pronunciation of a specific place-name. This was considered to be an important feature as the Orkney community is continuously changing, and understanding the original meanings of place-names in the landscape relies upon understanding their traditional pronunciation.

“I wanted a place-names project because place-names are very important to people. The language here which is Norse is now changing. So just like the sea is eroding the archaeology sites, the immigration of the English language is eroding the local language. As every successive generation disappears, so does a bunch of place-names and the understanding of the place-names – the way of pronouncing them has gone.”

Into Orkney
Project Lead

To date, the site has been promoted primarily through word-of-mouth which has been found to be a powerful tool for getting information out to Orkney residents and reflects the Island's strong sense of community. The organiser went through the Council's procurement route to select a developer for the site though she did find this process quite time consuming. An Orkney agency, Copla, was chosen and, being locally-based, this had the advantage that the project lead could visit them to talk through the design and discuss any issues.

6.3 Into Orkney

Future development of the site

The organisers are currently developing ideas for trails linking up different archaeological sites. A Viking trail has already been created - 600 years of Orkney's past is Norse - and there is an aspiration to develop a trail around place-names and to provide one that is particularly accessible.

“One of the things about growing old is that people become interested in their past and the fan base for the past is often people who are ageing. So I would like them to be able to rely on the Into Orkney website to give them the material material they need.”

Into Orkney
Project Lead

Impact and Benefits

- Into Orkney provides individuals with the opportunity to learn about the history of the sites they come across, see satellite images and photos of the area and link to the Canmore database for further information. The number of unique visitors to the website has been gradually increasing with 92 visiting it in October 2013, 105 in November, 107 in December and 137 in January 2014.
- There are now an estimated 3,500 monuments included on the Into Orkney site. Based on the site's success, the organisers were given a £10,000 development grant from the local authority to develop a Viking Trail.
- For anyone considering developing land in Orkney, they can now look online and see if there is any archaeology in the area where they propose to develop, what archaeologists say about it and, if necessary, consider how the development could be better designed to fit in with the local landscape.

Tips from the organisers for others

- Bringing the various parties on board at an early stage to help them input into the scheme and providing opportunities for peer reviews of the design early on helped facilitate the service's development.

Conclusion

For a relatively modest investment Make It Local Scotland has helped develop useful new digital services for local communities in a very short space of time. The ongoing costs of the schemes are small - typically around £1,000 - and the services are likely to continue to expand and grow as they incorporate new aspects.

None of the project leads envisaged that their service would have happened without the impetus from the Nesta award and this illustrates how challenge prizes can be a catalyst for innovation. What Make It Local Scotland has also shown has been the value in providing individuals working in local government with the space and permission to develop new services in a low-risk way, as this can unleash talent and stimulate cost-effective ways of delivering digital services. At a time of significant cuts to local government such innovations are important.

There are clearly practical lessons that can be learnt from these schemes for other local authorities and organisations looking to emulate the ideas or develop others around the use of open data sets. These include making sure that the data required for the service is actually available and is in a usable format and ensuring the service is marketed well and that this promotion is sustained well beyond the launch. What seems to have been an effective route for publicity has been using the local authority's existing media and, where possible, incorporating a feature in the app which a user would find invaluable, not just interesting.

All the projects mentioned the tight timeframe to deliver in and ideally would have liked a bit longer to develop their concepts. However, it does seem that a short timescale gave the projects momentum and enabled some of them to be more focused, agile and realistic in what they could deliver; whereas a longer time-frame might not have encouraged this.

Conclusion

“People thought they could do it better, in a different way, but given the timescales we couldn’t do that, we just had to move forward.”

Project Lead

Surprisingly few of the project leads had worked with digital developers before and some were almost learning as they went along, yet this did not act as significant a challenge as might be assumed. This seems the result of having selected developers who were:

- Local
- Able to demonstrate relevant previous experience through the delivery of similar projects
- Flexible
- Had the ability to demystify technology

Conclusion

Even when an authority is committed to making data sets available, there is often a lack of skills and a shortage of trained staff who can analyse that data. The UK's Sector Skills Council for Business and IT estimates that demand for data crunching staff will rise by as much as 18 percent a year, compared to 2.5 percent for general ICT staff.²⁵ Indeed, three out of every five firms currently report difficulties in finding data talent.²⁶ The result is that many data analyst roles in the public sector are being filled by people who learn on the job rather than by fully trained staff.²⁷

In the case of two of the participating local authorities, there was some initial internal doubt or resistance to the schemes. The project funding from Nesta was beneficial in this respect as it gave the endorsement of an outside body willing to invest to make the ideas happen. The resistance was overcome through gaining senior level buy-in or simply by just pushing ahead with the scheme regardless:

“We had a snowball which was already travelling down the hill at some speed and we'd given commitments to doing it, so it was difficult to give any resistance to something that was already moving. We did get some moaning that we should have involved them earlier, but this was a way of showing that we couldn't stop and they just had to get behind it”

Project Lead

²⁵ E-skills UK (2013) Big Data Analytics: An assessment of demand for labour and skills, 2012-2017 .

²⁵ Ibid.

²⁶ Shakespeare, S. (2013) Shakespeare Review: An independent review of public sector information.

Conclusion

This resistance is perhaps unsurprising as the projects represent a shift in how local government services are delivered. Those working within local authorities have, by and large, tended to deliver services to people, rather than created services with them and so initiatives such as the Make It Local Scotland projects can represent a culture change – and not just to the local authorities but also to their local communities. The success of the projects is reliant to varying degrees on residents getting actively involved and contributing to the services and not just being passive recipients of them. However, all the projects struggled to get their users to provide or upload information though it is still, of course, relatively early days.

What has been particularly noticeable has been the personal commitment by the project leads to making the digital services happen and the sense of achievement that they accrued from navigating their concepts to reality.

“I have got bitten by the bug, the innovation bug. It has made me think ‘what can we do next? How do I make that happen?’ which I wasn’t thinking about before.”

Project Lead

Several of the project leads mentioned how it can be difficult to get local authorities to work together and how this prevents new services being developed. The seemingly simple act by Nesta of bringing the project leads together on a few occasions was particularly appreciated by them as it provided the opportunity for them to share challenges and solutions.

Conclusion

Indeed, some of the challenges which the projects went on to face are ones where perhaps discussions with other local authorities who had already done something similar might have helped them avoid or overcome earlier. Nesta is now embarking on a new Open Data Scotland project in partnership with local authorities in Scotland and Europe.



Perhaps the greatest impact of Make It Local Scotland may not be the projects it directly delivered but those that are now being inspired as a result of undertaking the pilot schemes.

In most cases the projects built confidence within the local authority around open data, demonstrated what could be achieved from opening up data sets and acted as trail blazers for larger and more ambitious schemes.

“We showed that you could build something with our data, something different and people didn’t know they could do that... It has given people a very fresh outlook on what you can do with data.”

Project Lead

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