# Glasgow unlocks the potential of open data

Enabling easier and wider access to data is giving Glasgow new insights into its value in stimulating civic innovation. Service providers, start-ups and citizens are using the data to take a fresh look at the city and come up with new, practical solutions to its challenges.

It's widely acknowledged that we are on the eve of the next era in the information age. An era driven by the explosion of data captured through sensors, devices, the internet and people. There is also agreement, though, that cities wanting to unlock the value of this rich new raw material face a big challenge: opening up datasets typically locked away in different organisations. It's a challenge Glasgow wanted to rise to, recognising that once data is freely available it can be shared and used to build connections, provide unexpected perspectives and inspire new approaches and solutions. In particular, the city saw open data as a potential enabler of its regeneration and service transformation programmes.

## Benefiting from data

Having won a £24 million (€31m) smart city demonstrator competition run by the UK's innovation agency, Glasgow established Future City Glasgow, with the OPEN Glasgow data project at its heart. Setting out with the primary objective of understanding and proving the benefits of open data, the project team designed four activities: persuading organisations of the merits of participation; working out how to create an open platform that could be scaled across the entire city; building a benefits model to convince the public sector of the value of open data and to stimulate the uptake of smart city opportunities; and developing a methodology and toolkit to support the capture, processing, sharing and use of data.

> The impact of open data is far more powerful and far reaching than the city council had expected and it is now being positioned as a key enabler at the heart of the city's transformation programme.
>
> *Dr Colin Birchenall, lead architect, Glasgow Future Cities Demonstrator,*
> *Glasgow City Council*

# cities in action

May 2016

where: Glasgow, UK
what: knowledge society
when: 2013-2015

Through global research, the team discovered and documented the civic value of providing universal access to data on everything from energy consumption to hospital admissions, tourist numbers to school attendance. It learned that: value comes from creating greater transparency and empathy and bringing diverse datasets together to unearth new insights; that data-driven initiatives can completely change the way councils engage with communities and design their services; and that access to city data stimulates businesses to develop products for the good of the city.

## Cataloguing the city

The team then turned its attention to realising the project's ambition of enabling data from across the city to be published as 'open by default'. What was needed was a data platform that could cope with a high volume stream of real-time raw data from traffic, environment and energy systems as well as large datasets about aspects of city life such as the built environment and demographics. What was developed was an expandable Open Data Hub bringing together cloud computing, big data analytics and the Internet of Things which automatically allows the publication and storage of the city's growing collection of data streams.
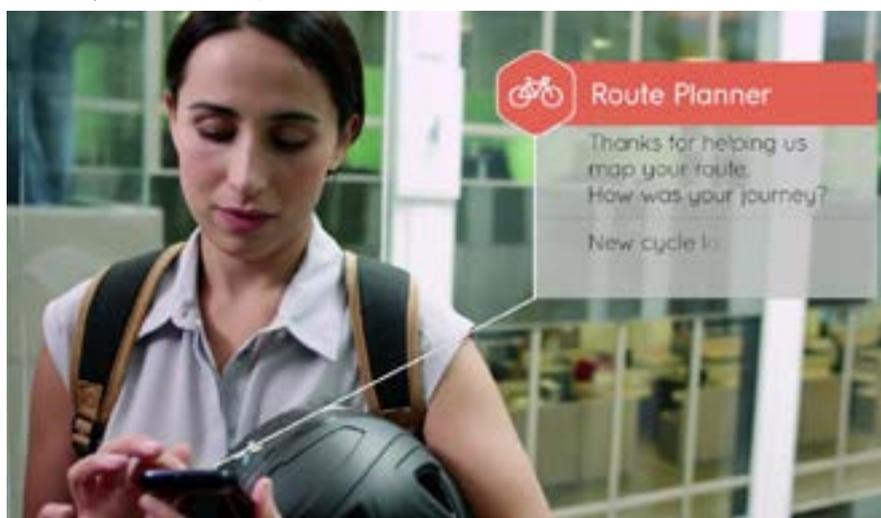
With stakeholders aware of the value of publishing their datasets and communities trained to become contributors of data rich with local knowledge, a portfolio of initiatives was established to provide a pipeline of demand for open data. Key among these is the Glasgow Data Launchpad. This online catalogue makes data easily searchable and usable. A retailer might want to know about city footfall, for example. A mobile app developer might be looking for raw material to make an idea come to life. Combining datasets might help a public service provider spot where services could be integrated to work better for all.

## Stimulating smart solutions

For consumers there's the City Dashboard, where they can create a uniquely personal snapshot of the city from a selection of 'digital widgets', building a dashboard to show for example how best to navigate the city during a busy day to the best time to stargaze at night.

There are OPEN maps and apps too, both enabling the sharing of knowledge about everything from volunteering opportunities to city history and healthy living to create rich, layered interactive guides to local assets and services.

As a demonstrator project, OPEN Glasgow has always been intended to have an impact far beyond the city. Other municipalities can learn from the benefits



model, as well as the case studies produced on individual initiatives. The off-the-shelf open source product used for the Open Data Hub will enable Glasgow to share this development with other cities too. Learnings from the project are also being fed into city networks in England and Scotland where Glasgow is the lead for smart cities and talks are underway about working similarly on a European level.

" The community map is ideal to assist people to integrate back into the community; it creates an opportunity to put whatever is going on in your local area from arts and drama to volunteering opportunities, leisure activities and community centres. "

*Walter Brown, recovery worker,*
*Easterhouse Alcohol Awareness Project*