Open Data, Open Cities. Case Helsinki Region Infoshare www.hri.fi

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Abstract

Open data is a global movement and still quite a young movement, but it is spreading rapidly. Adopting and implementing an open data strategy is a big issue and a hughe task in practice. By opening up their databases and data sets, the **Helsinki Region Infoshare** cities (see www.hri.fi) wish to increase their citizens' understanding of the development of the cities and their neighbourhoods. Open and easily available urban and regional information contributes to a better city and higher quality life of the citizens, it can create new services and businesses, and it can boost research and development activities. Open data advances tranparency, supports participation and engagement, and will create pressures for change sand improvement. It is all about a new information policy and culture. Open data enhance democracy and social and economic growth. Therefore it is desirable that NSOs would provide official statstics as open data to as large an extent as possible. The paper will demonstrate, by using the Helsinki Region Infoshare service as a case study, how various end-user groups will use and benefit from open data. For example, geo-coded public statistical data accessible as open data on cities, their functional urban regions, and also sub-city districts provides new framework conditions for innovative statistical applications and numerous possibilities for mobile and other applications. Open data enables smart solutions and contributes to a smarter city.

Key words: open data, open statistics, Helsinki Region Infoshare, open innovations

1. Introduction

In terms of supply of data, we have today numerous immensely rich sources. This applies also to statistics and statistical data. Though, there is still a problem. That is do we know about the information sources, do we have open access to them, do we use them? Or, maybe too many of these sources remain unutilised potentials? Can we afford having under-utilised sources of information, especially official statistics? No, we can´t.

Luckily, there are signs of new thinking and new entries in terms of emerging new information policies, which are in favour of open information, free access to public data. Open data is a global movement and still quite a young movement, but it is spreading rapidly. The U.S. data.gov site was launched in 2009 and its U.K. counterpart, data.gov.uk , in 2010. For example the U.S. data.gov offers at present almost 380,000 raw and geospatial datasets and 350 apps from 172 agencies and sub-agencies.

This paper will demonstrate, by using the Helsinki Region Infoshare service www.hri.fi as a case study, how various end-user groups will use and benefit from open data. Access to relevant information contributes to better decision making and better life in terms of liveable cities, competitiveness and sustainability. Open data, open official statistics empower people.

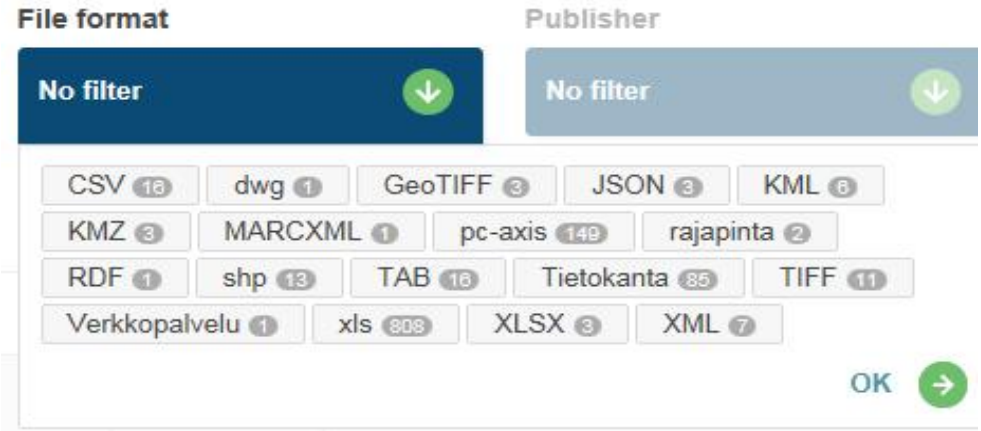
2. Open Data, Open Cities

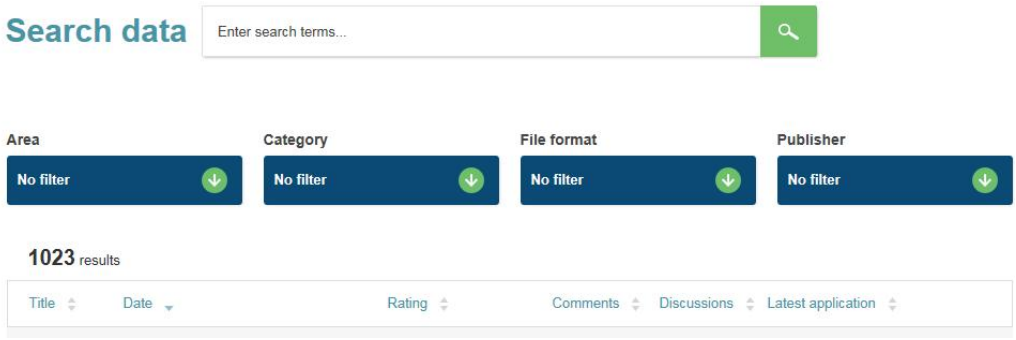
Open data is a key component of open government, of an open city. The City Boards of the cities of Helsinki, Espoo, Vantaa and Kauniainen (the four core cities of the Helsinki Region) adopted a new open data policy and strategy in May 2010 and initiated the Helsinki Region Infoshare project, which launched the beta version of the Helsinki Region Infoshare open data service in March 2011. In March 2011 some 400 data sets were opened, currently the Helsinki Region Infoshare www.hri.fi offers a good 1,000 open data sets. Most of the data are statistical data and the majority of the open data are geocoded.

The open data policy adopted by the City of Helsinki and its neighbouring cities focuses on areas such as

- public data into use, open access to all
- transparency and accountability
- participation and citizen engagement
- internal and external co-operation
- open innovation
- social and economic growth

In line with the open data policy **statistics and projections** offered by the Helsinki Region Infoshare service comprise the following topic areas: population, housing, employment, education, culture, living conditions, well-being, economy, commercial activities, transport, urban structure and environment. The information is typically updated annually, quarterly or monthly. The data is offered simultaneously in many formats (see www.hri.fi/en/) :





In terms of **applications** culture and transport are the first application areas using public open data resources. As an example of doing good with open data we next present the winner of the Apps4Finland 2012 Competition and the European OpenCities App Challenge in 2012, namely **the BlindSquare** (see http://apps4finland.fi/2012/12/04/3064/). BlindSquare, developed by Mr. Ilkka Pirttimaa from Helsinki, is an audio-based augmented-reality application for blind people who get information about the user´s surroundings from FourSquare. The system helps blind people to get around in the city more easily by informing them about nearby public services, businesses and places of interest. BlindSquare has users in more than 50 countries and is currently available in eight languages. In the Helsinki Region information about public services and many private services too are made available to the apps by **the open Helsinki Service Map** (see http://www.hel.fi/palvelukartta/Default.aspx?language=en&city=91).

Open data on navigating and travelling in Helsinki and the Helsinki Region is offered by Helsinki Region Transport, HSL (see http://www.hsl.fi/EN/). HSL wants to promote the openness of public sector information resources and to encourage citizens to participate in the development of services. HSL's open information resources can be utilized through **the Journey Planner API**. Instructions for the use of the API are available at http://developer.reittiopas.fi/pages/en/home.php.

A majority of the open data mentioned and demonstrated above are maintained by statisticians, researchers and planners employed by municipalities and their joint bodies in the Helsinki Region. The same data sets also serve as sources for urban and regional statistics.

2.1 Open Data, Open Statistics Make a Difference

Whilst there are obvious benefits in economic and social terms to people who are a bit familiar with and know about open data, this may not be apparent to a senior manager setting priorities within an organisation who is a key data holder. Staff responsible for data governance traditionally are devoted to secure and protect data and often find the transition to become effectively an open data service provider challenging. The question arises how can we help our colleagues who are data holders to share their data?

A national and local data policy advocating and requesting open data is a powerful support to sharing data for dree and to establishing an open data service. We also need to link data releases to the local priorities or issues of the data holder and target those areas to achieve success in opening up data. Getting data holders comfortable with the process of multiple releases and seeing benefits (e.g. community engagement, improvements through open feedback & measurement, reduced service requests due

to proactive information, or new value-added services) will help to change the attitude to open data. Data holders will be aware of and recognise how their support of open data usage make a difference to people´s life. Open data provides an opportunity for positive transformation within our information society, where old hierarchies are replaced by agile, diverse, networked and experimental progress and cooperation A new culture of sharing public data and knowledge will get rooted and grow.

2.2. Open Data is Cooperation

A large network of cooperation and collaboration organised the the world's first *Open Knowledge Festival* in Helsinki, Finland on 17-22 Sept 2012, http://okfestival.org/# . It was a week of participatory sessions, keynote lectures, workshops, hackathons and satellite events with over 1,000 physical participants and 12,000 virtual participants from across the globe. OKFestival combined annual events OGDCamp and OKCon to form the first festival of its kind. The theme was *Open Knowledge in Action*, looking at the *value* that can be generated by opening up data and knowledge, the ecosystems of organisations that can benefit from such sharing, and the impacts transparency can have in our societies. It is about boosting the information society of today.

The Open Knowledge Festval programme wascomposed of 13 topic streams:

- Open Democracy and Citizen Movements
- Transparency and Accountability
- Open Development
- Open Cities
- Open Knowledge and Sustainability
- Open Geodata
- Open Research and Education
- Open Design, Hardware, Manufacturing and Making
- Open Cultural Heritage
- Open Source Software
- Data Journalism and Data Visualisation
- Gender and Diversity in Openness
- Open Business and Corporate Data

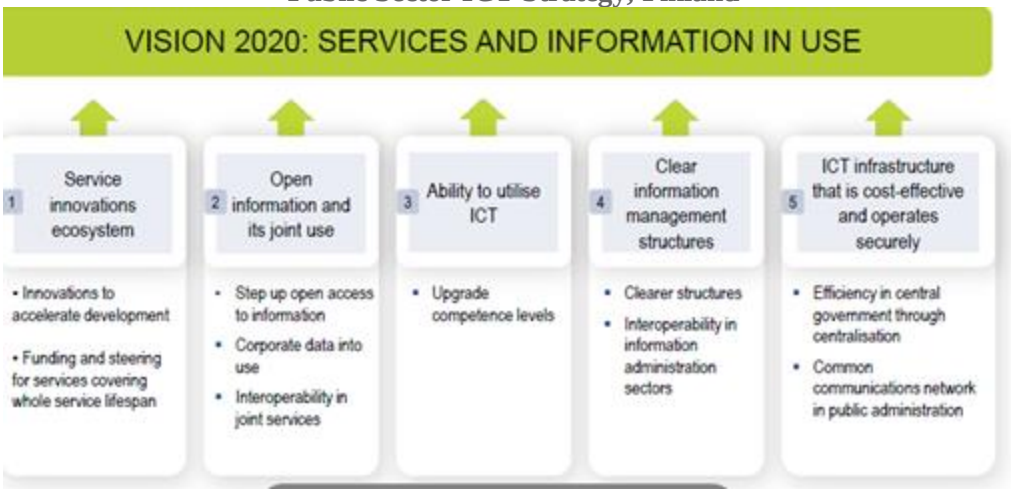
The topic streams of the above Programme reflect expectations of open government and official statistics. More expectations are to follow. The open data movement is global, energetic, forward looking and expanding.

2.3 A Few More Examples of Entries Promoting Usage of Open Data

On European level we got the Directive on the re-use of public sector information (PSI Directive) already in 2003. A revision of this directive took place in 2011. The review of the Directive is one of the key actions of the "Digital Agenda for Europe" (see http://ec.europa.eu/information_society/policy/psi/index_en.htm). More information on access to open data in Europe are to be found at Communication on Open Data , **http://ec.europa.eu/information_society/policy/psi/open_data_portal/index_en.htm** and **http://publicdata.eu/.**

The Ministry of Finance, Finland launched the ever first *Public Sector ICT Strategy* in November2012, (see: http://www.vm.fi/vm/en/04_publications_and_documents/03_documents/20121112Public/Public_sector_ict.pdf).

Public Sector ICT Strategy, Finland



A foundation to the strategy is provided by principles approved for government openness, information sharing, interoperability and joint use. Principles for information sharing have been approved in *the Government resolution on improving the availability and promoting the re-use of public sector digital information resources* (March, 2011).The strategy will support the implementation of these principles. The implementation of the second pillar in the above picture *"Open information and joint use of information"* will be put into action by *the National Open Data Programme 2013-2015* (set up on May 17th, 2013).

Statistics Finland is building ready-made interfaces for the users of open data. The construction of the interfaces has been started from the StatFin database in 2012 and will be extended to other sets of data, (see http://tilastokeskus.fi/org/lainsaadanto/avoin_data_en.html). Statiscs Finland also contributed to the Apps4Finland competition in 2012 with the Stats4Finland – Special Award.

Data journalism helps you get impact of open data, also of open official statisics. In data journalism news and other journalistic products are based on large data sets. Data journalism explores the new possibilities of combining "nose for news" with usage of the large range of digital information available.

2.4 Favourable Framework Conditions Smooth The Way Forward

According to the experiences so far from the Helsinki Region Infoshare there are a number of favourable framework conditions to be mentioned. These are the support of the city leadership, the support of Sitra, the Finnish Innovation Fund and the Ministry of Finance, the encouragement of the open data movement in Finland and abroad, and inspiring examples in a few countries and cities. The exceptionally good cooperation with the data holders in opening up their data is worth special acknowledgment.

Moreover, the Helsinki Region Infoshare was able to take advantage of special occasions, such as Helsinki being designated as the World Design Capital 2012. *Design embedded in people's lives* and *Open Helsinki* were overriding themes of the Helsinki's World Design Capital year. Design brings the users' point of view to processes where solutions to citizens' needs are sought. *Embedding Design in Life* and *Open City* apply well also to statistics.

The City of Helsinki was also one of 24 cities around the world to be awarded IBM´s Smarter Cities Challenge grant in 2011.The aim of the Helsinki challenge was to apply IBM´s expertise in visualisation (see http://smartercitieschallenge.org/city_helsinki_finland.html).

A third important measure is *Code for Europe* (http://codeforeurope.net/). This is a new organization striving to enliven a culture of innovation in city government. Helsinki is participating in this fellowship program currently running with focus on open data in the Helsinki Region.

3 Conclusions

The expectations were that by adopting an open data policy and also by further promoting open government principles, cities could - in collaboration with engaged citizens, various organisations including also non-profit organisations, research and business - deliver more and better service and improved democracy. Despite the short history of open data there is evidence that open data can significantly contribute to and facilitate a test bed for value-added services and innovative applications.

The HelsinkiRegion Infoshare celebrated its two years of open data service in April this year. Thanks to the great support of the city leadership, good and encouraging cooperation with all parties involved, and a committed work team, good results have been achieved and future prospects are good. In November 2012, the Helsinki Region Infoshare won the Mayor's Achievement of the Year Award conferred annually to the City of Helsinki personnel and work bodies (http://www.hel.fi/hki/helsinki/en/news/helsinki+region+infoshare+awarded+for+access+to+data+sources9). The jury comments on the Helsinki Region Infoshare were as follows: "The project serves as a pioneering example for making public data accessible. Accessible public data increases efficiency in administration and improves the foundations of democracy and active citizenship. The project has created the foundation for a broad network among the cities."

References

Helsinki Region Infoshare, HRI www.hri.fi
http://wdchelsinki2012.fi/en
http://www.hel.fi/palvelukartta/Default.aspx?language=en&city=91
http://www.hsl.fi/EN/
www.data.gov.uk
http://www.data.gov/
http://apps4finland.fi/2012/12/04/3064/)
http://okfestival.org/#
http://www.vm.fi/vm/fi/05_hankkeet/02381_avoin_tieto/index.jsp
http://www.vm.fi/vm/en/04_publications_and_documents/03_documents/20121112Public/Public_sector_ict.pdf)
http://smartercitieschallenge.org/city_helsinki_finland.html
http://datajournalismhandbook.org/
http://codeforeurope.net/
http://tilastokeskus.fi/org/lainsaadanto/avoin_data_en.html
Communication on Open Data
"Digital Agenda for Europe"