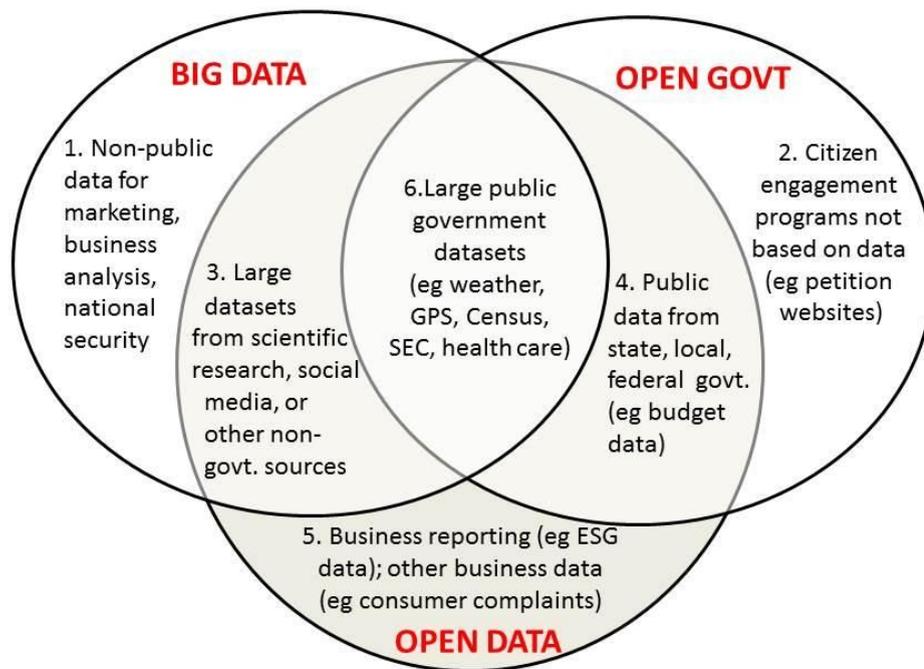


Big and Open Data

Charlotte Freyne

The LCR Activate programme aims to reduce Liverpool's economic deficits within the UK through a sustained support and an increased cooperation between small and medium size enterprises. By focusing on digital and creative businesses LCR Activate will provide benefits for the enterprises involved and importantly for the individuals that use them. One of the ways in which these benefits will be realised is through the utilisation of 'big and open data'.

It may sound technical but 'big and open data' can be easily understood in the form of the Venn diagram below. Highlighted are three types of data. First, Big data- large banks of data collected and used by companies which is not accessible to the public; next, open government- data collected by the government to promote citizen engagement which may or may not be publicly accessible; and finally, open data- data collated by private companies which they choose to share to benefit themselves. For the LCR Activate programme our interest lies in section 3 of this diagram which overlaps big data with open data without governmental control; creating 'big and open data'.



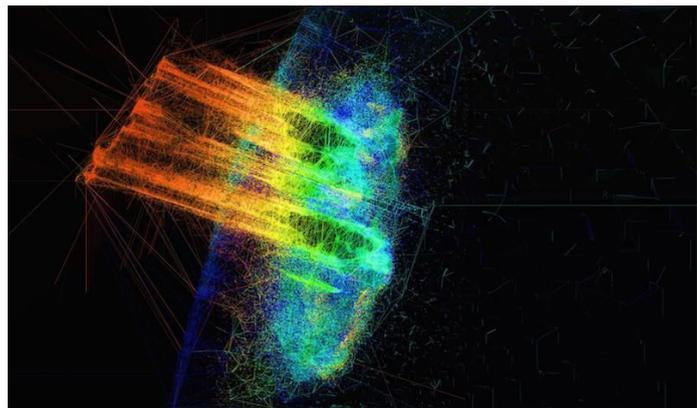
Joel Gurin¹

¹ <http://www.datamashup.info/big-data-and-open-data-whats-what-and-why-does-it-matter/>

In this section large collections of technical or scientific data are shared with smaller organisations, giving them the opportunity to use information they would never be able to collect themselves. This allows digital enterprises to engage with cultural organisations in a mutually beneficial relationship.

For a large scale and established example of this see Zooniverse.org, a company which shares large amounts of scientific datasets with the public and uses their contributions to make advancements and further discoveries in areas such as galaxy morphology and historical biodiversity.

However, 'big and open data's' impact does not have to come in the form of global scientifically relevant results. Instead complex data sets can be transformed into something entirely different but just as interesting. This was the case in FACT's 2016 exhibition *unfold* which saw artist Ryoichi Kurokawa explore data from molecular clouds provided by the Research Institute in the Fundamental Laws on the Universe in France. Using this previously undocumented data, Kurokawa was able to construct 3D representations of space, stars and clouds; creating an immersive experience right here in the gallery for science and art lovers alike.



However some artists and researchers are pushing the boundaries of art and data even further, creating works able to respond and react to live data as it is being made. Some of earliest exponents of this were statistician Mark Hansen and artist Ben Rubin whose installation *Listening Post* (right) extracted text from thousands of chat rooms and bulletin boards in real time to be displayed across a suspended grid of screens. *Listening Post* has been described as 'a visual and sonic response to the content, magnitude, and immediacy of virtual communication' and has provided an innovative way of understanding our reliance on immediate, virtual data.



FACT has also been at the heart of social change generated by big and open data. For example, in 1999 FACT teamed up with artist collective Superflex to launch Tenantspin which brought together Liverpool Housing Action Trust, a panel of residents (most of whom were over 65) and an artist collective to share information otherwise inaccessible to each.

This resulted in the elderly residents coming together with computer programmers to create a series of web-streamed magazine style discussion shows on topics such as rent increases, regeneration and high rise living. Not only did the success of this project result in artist commissions and improved discussions on social housing; but for the residents it provided easier access to information; an increased sense of community; and even health benefits.



tenantspin, New Museum, New York - Photo: Superflex²

Finally, within its goals to help digital and creative industries LCR Activate aims to increase the scope of 'big and open data' by opening up the viability of using government procured data. This is especially relevant in today's climate after the closure of the Government Audit Commission in 2015 and the following localisation of auditing services to authorities and businesses. More importantly the new bill sought to allow taxpayers to inspect local bodies' accounts and raise issues to the relevant auditor: increasing transparency and strengthening local accountability. Unfortunately the introduction of an overseeing transitional body: the Local Audit Framework and the complex nature of the open data has meant very few taxpayers are actually able to utilise the data effectively.

² http://superflex.net/activities/2002/05/01/superchannel_-_tenantspin

LCR Activate hopes to build upon the success of examples like tenantspin and Zooniverse; as well as potentially successful ventures like the Local Audit Framework, by bringing 'big and open data' to digital and creative ventures here in Liverpool. By giving these enterprises and community groups access to world class facilities like the Hartree Centre and established institutional networks like that of Liverpool Science Park, 'big and open data' can have a huge impact: not just on businesses but on individuals as well.

Further Reading

[Open Data Institute](#)

[Government Open Data Search](#)

[Big data and open data: what's what and why does it matter?](#)

[The Power Dynamics of Big and Open Data](#)

[UK Open Data Portal](#)

[Liverpool City Council Data](#)