UBDC Services for Local Authorities

Big Data Workshop for Local Authorities - 12 Nov 2015

Nick Bailey & Des McNulty Urban Big Data Centre





- Big Data as 'naturally occurring', not designed for research
 - Legal or practical barriers
 - Analytical challenges
 - Infrastructure requirements

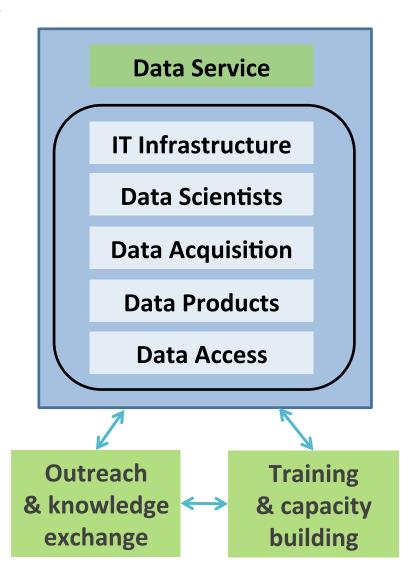
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Sensor	Environmental, water,
systems	transportation, building
	management systems, CCTV,
	Internet of Things
User-	Participatory sensing systems,
Generated	social media, GPS, online
Content	social networks
Admin've	Open administrative data
Data	(aggregate); confidential
	person-level microdata
Private	Customer transactions;
Sector	business web use (e.g.
Data	adverts),
Contextual	Media - text, images, sound
	recordings; weather forecast
Hybrid or	Linked data including survey-
synthetic	sensor, census-administrative
Data	records



UBDC

 "Promoting the use of innovative methods and complex urban data to address challenges facing cities"

Services to connect
researchers to data for
policy-relevant research



Confidential data — Data Access

- UBDC does not acquire personal data from administrative systems but it does help researchers negotiate access to deidentified or anonymised data
- Shared infrastructure secure data service
 - Secure computing environment
 - Linkage service
 - Monitoring of use
 - Output screening
 - Data scientist support



Accessing the service

- Independent Research Approvals Committee
 - Scientific merit
 - Potential for impact
 - Value for money
 - Fit with UBDC mission
 - Privacy and ethics
 - Feasibility
 - Researcher approvals for confidential data
- Support in application process
- Researchers responsible for analysis, UBDC provides support

Training and capacity building

- Training to support skills development- both introductory and more specialised applications courses (focusing on R and on GIS) ran in summer 2015 – planning more in 2016. Interested to know what training would be most useful to LA partners
- Co produced research and knowledge exchange activity – learning by doing projects together
- SASnet from Jan 2016: additional seminars, training workshops and short term problem focused fellowships



Impacts and knowledge exchange

- Developing memoranda of understanding first one with Renfrewshire Council, another under discussion with Glasgow – sharing data and expertise
- Joint work on making better use of bid data generated through e.g. Future Cities demonstrator
- Opportunities opened out by potential uses of complex data, including protected and administrative data
- Joint event with Scotitsh Government on predictive analytics



