

SMART APPROACH. BRIGHT FUTURE.

Smart City Commission Data Workshop Update

Wednesday 23rd September 2015



THE TASK:

Instructed by the Smart City Commission to develop a Briefing Paper

Methodology:

- Engage key Commission members in a Working Group to define the parameters of the data workshop
- Determine focus and theme
- Identify stakeholders and data holders

Anticipated Outcomes:

- Enhanced intelligence to move Birmingham forward as a City Open by Default
- Insights into how innovative solutions can support service engagement
- Information for smarter, more efficient and effective service delivery

SMART APPROACH. BRIGHT FUTURE.

Birmingham Smart City Data Working Group

Held on: 16th July 2015

Attended by:

- Digital Birmingham, Birmingham City Council
- Future Cities Catapult
- University of Birmingham
- Connected Digital Economy Catapult
- Birmingham City University

Agreed focus of data workshop

- 'A day in the life' of an archetypal citizen (retired, health issues, etc.)
- Identifying challenges/pains points
- Service engagement
- Data journey

SMART APPROACH. BRIGHT FUTURE.

Birmingham Smart City Data Workshop

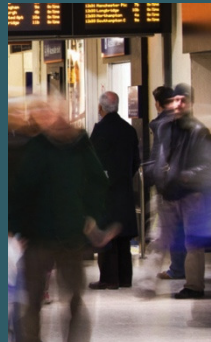
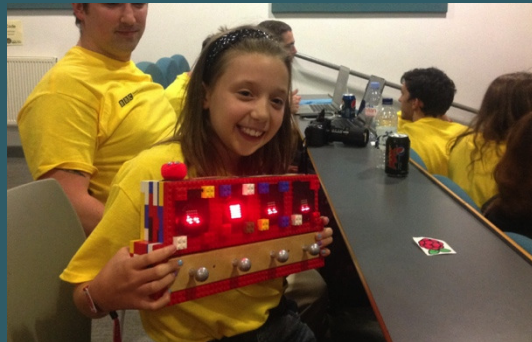
Held on: Tuesday 15 September 2015

Hosted by: Impact Hub Birmingham

Facilitated by: Robin Daniels, Redpill Group

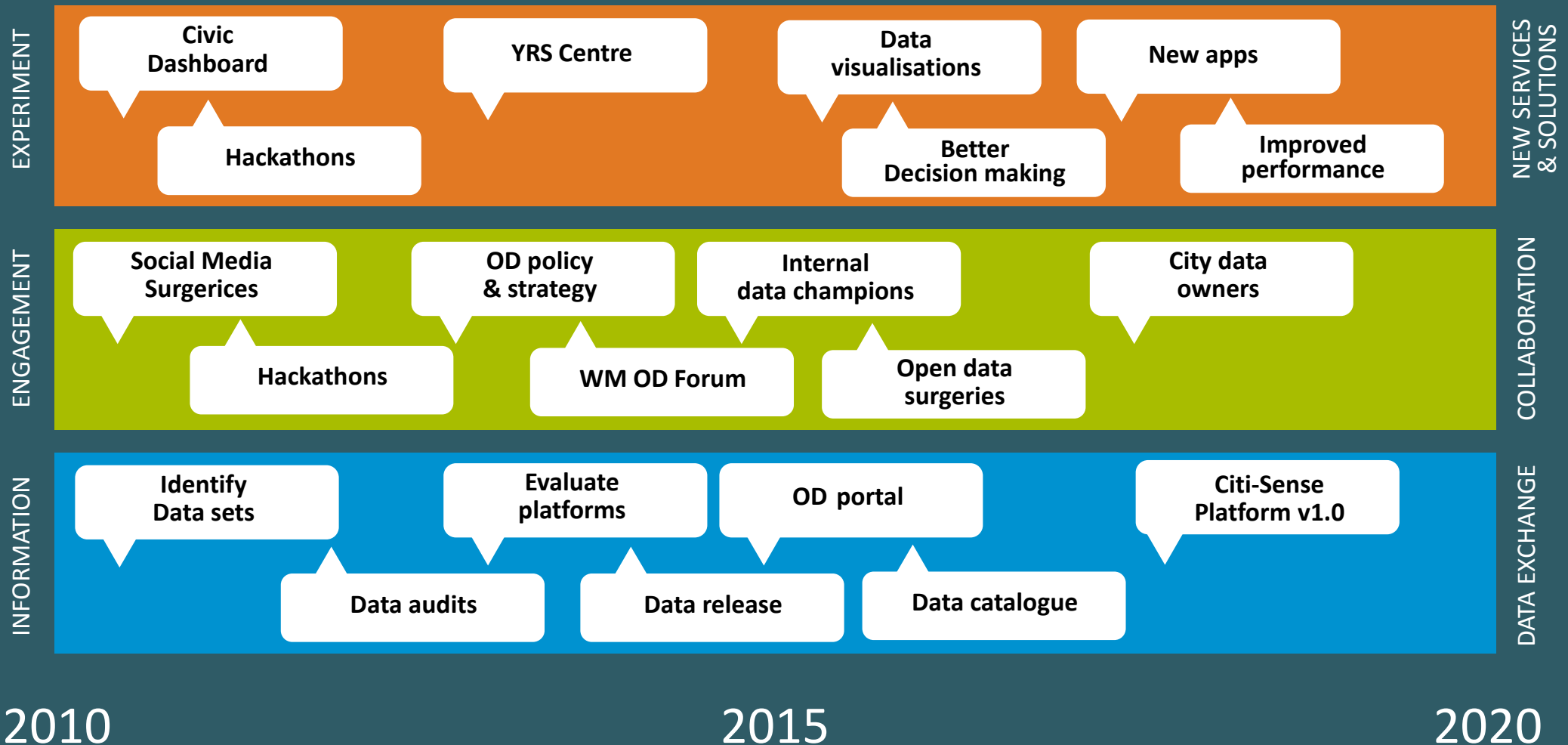


Redpill Group
INSIGHT . INNOVATION . IMPACT



Time	Agenda Item	Lead
10.20	Arrival Refreshments	
10.30	Welcome & Introductions	Chair: Raj Mack , Birmingham City Council
10.40	Introduction to the Smart City Data Workshop - Outcomes from today session Setting the Data Scene - Vision, Operational Framework, Data Journey Mapping, etc. Smart City East Birmingham Demonstrator - FCC, City4Age, IoT & ESIF Birmingham Speaks Feedback - Open Data for Birmingham	Facilitator: Robin Daniels , Redpill Group Stuart Lester, Nicola Bryant and Nikki Spencer , Birmingham City Council
11.10	Atos Case Study Overview Blaenau Gwent County Borough Council/Public Sector partners – Multi Agency Data Sharing: Vulnerability Intelligence Project (VIS) - An Operational Practitioners View	Jim White , Head of Local Public Services, Matthew Glass and Mark Wilson, Atos
11.30	Tackling the challenges of personal and proprietary data; trust, privacy and security	Robin Daniels , representing Connected Digital Economy Catapult
11.50	‘A Day in the Life’ use case - Challenges & Pain Points? - Service Engagement - Data Interactions - Difficulty Vs Impact Matrix - Data Operationalization ... who, where & accessibility	ALL Facilitated by Robin Daniels Discussion and data journey engagement
12.30	Working Lunch available	
13.20	Next Steps Key points to be fed into the Smart City Commission Briefing Paper	Robin Daniels and Nicola Bryant , Birmingham City Council
13.50	AOB	
14.00	Close	

Our data story is unfolding



TRANSPORT

HEALTH

ENERGY

Making it real - Data journey and mapping

“There is still more data that can be released, more uses of data that can be demonstrated and more that can be done to improve data quality and literacy.” Open Data Roadmap for the UK - Open Data Institute, 2015

- ❑ Shape around priorities & thinking for demonstrator
- ❑ Whole journey approach
- ❑ Day in the life – scenarios (needs, wants, challenges and pain points)
- ❑ Data opportunities & insights
 - ❑ What data – as is
 - ❑ What if data- what difference
 - ❑ Who has what & who wants what?
- ❑ Defining & shaping our data journey with partners – end goal and vision



“East Birmingham Smart City Demonstrator will enable citizens to pull, access and manipulate information that helps shape their lifestyles”

East Birmingham Smart City Demonstrator Themes

- Health & Well-being
- Transport & Mobility
 - Skills

SERVICES

BCC Services underpinned by Data

DATA NEEDS

vision/mission

products

data science

data infrastructure

data access

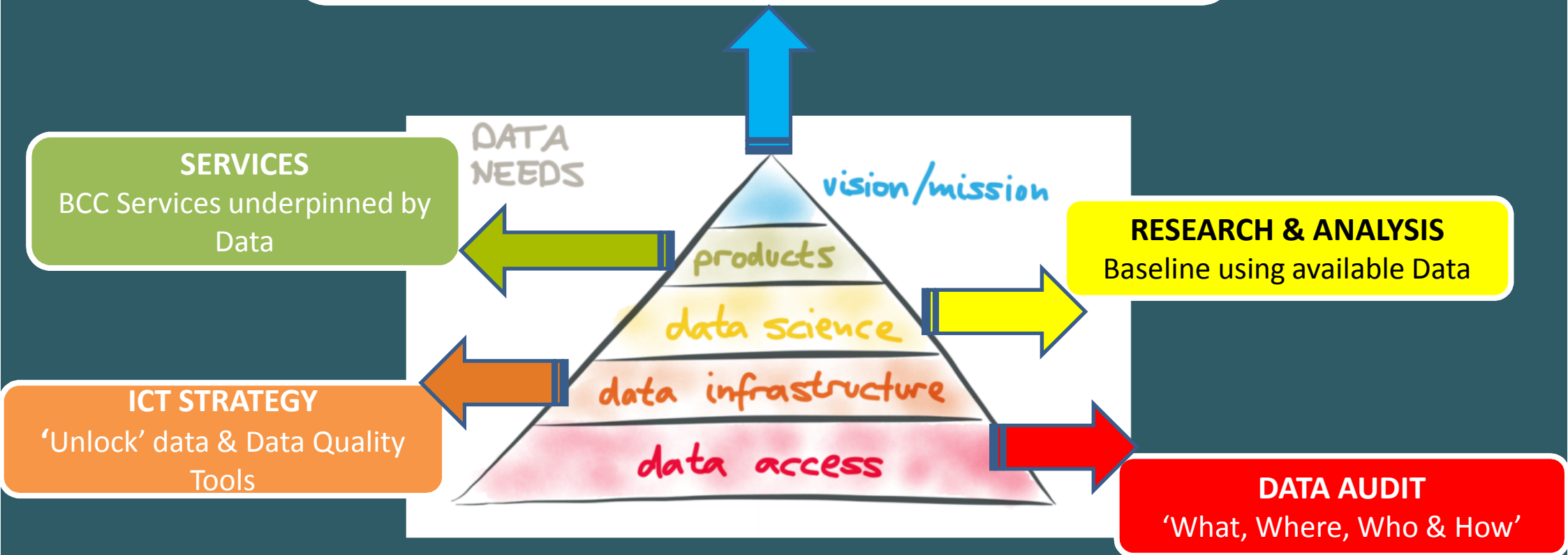
RESEARCH & ANALYSIS
Baseline using available Data

ICT STRATEGY

‘Unlock’ data & Data Quality Tools

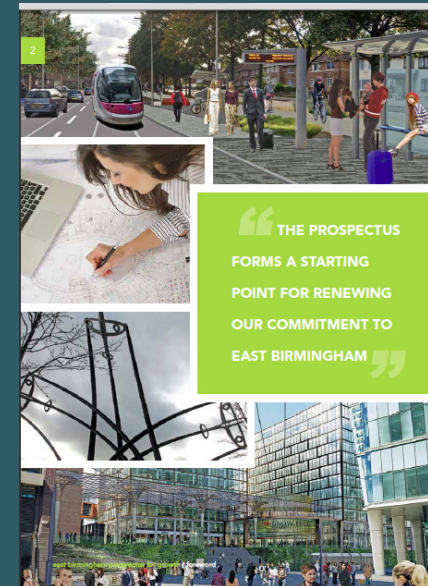
DATA AUDIT

‘What, Where, Who & How’

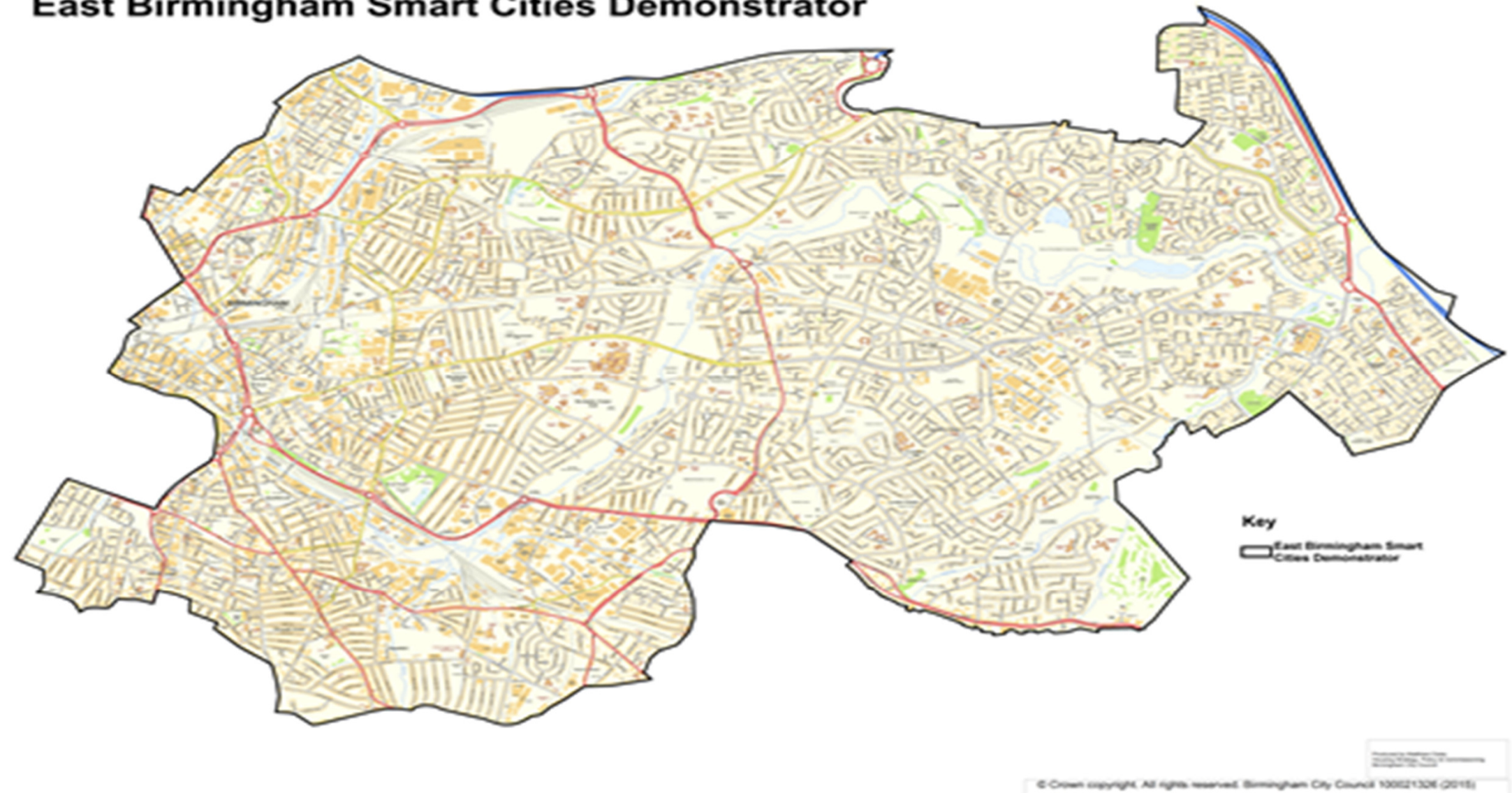


“The Birmingham Smart City Commission has committed to support a Smart City spatial demonstrator in East Birmingham

The aim is to embed Smart City principles (release, use and access to **data**, **integration** and use of digital technologies; and strong citizen / business **engagement**) to address the region’s growth challenges and reduce inequalities



East Birmingham Smart Cities Demonstrator



CHALLENGE: Low skills; high unemployment; large inequalities – health, social & economic

OPPORTUNITIES: High proportion of core employment and untapped potential of place – increase opportunity for people to connect to education, training, jobs and social opportunities to contribute to a better and more sustainable way of life

PRIORITIES: Quality of place; health & mobility

AMBITION

Our aim for East Birmingham is to **change perceptions of the area, the way people move around the area and the health and life chances of people that live there”**

Birmingham Speaks...

Birmingham speaks... Birmingham City Council

Home Log In Register About

Open Data for Birmingham

See All Ideas

Birmingham City Council has recently started to release data through the [Birmingham](#) commitment to open data we would like to get some ideas for what data people would like to see made available through the DATA FACTORY?

We would like to hear and discuss your ideas about data that is held by Birmingham City Council in a better way to benefit Birmingham and its people.

Some things to consider when formulating your idea:

- What BCC data would you like to see made available through the DATA FACTORY?
- How would you use this data if it was available?
- What would you like to see done with this data?
- How will the release of this data benefit Birmingham and its people?

Once the discussion has ended all ideas will be assessed by a panel headed by a BCC representative to select the most useful data sets through the Birmingham DATA FACTORY portal.

14 ideas matching your filter

Idea Title	Votes	Comments	Date
Amount spent & frequency of use of...	0.0 (0 votes)	1 comment	August 03, 2015 at 06:41PM
Parking tickets issued	0.0 (0 votes)	0 comments	July 30, 2015 at 04:23PM
Elections information	0.0 (0 votes)	1 comment	June 22, 2015 at 09:19PM
Pot hole: Date Reported, Location, Date Passed to...	0.0 (0 votes)	0 comments	June 22, 2015 at 05:42PM
Location of all car parking bays across the city.	0.0 (0 votes)	0 comments	June 22, 2015 at 01:51PM
Data about Birmingham's public rights of way	5.0 (1 vote)	0 comments	June 17, 2015 at 10:50AM
Air Pollution	5.0 (1 vote)	2 comments	June 15, 2015 at 08:22PM
Competitive Sport and associated health benefits.	0.0 (0 votes)	2 comments	June 15, 2015 at 11:05AM
More usable version of the indices of multiple...	0.0 (0 votes)	6 comments	June 09, 2015 at 12:40PM
Access to Houses of multiple occupancy...	0.0 (0 votes)	1 comment	May 26, 2015 at 05:01PM
Grant funded activity	5.0 (2 votes)	3 comments	May 22, 2015 at 03:10PM
School catchment data	5.0 (1 vote)	4 comments	May 18, 2015 at 05:23PM
Leisure Center Usage	5.0 (1 vote)	1 comment	May 14, 2015 at 11:56AM
Housing Data	4.5 (2 votes)	1 comment	May 14, 2015 at 11:46AM

14 comments received via Birmingham Speaks

birmingham.dialogue-app.com/open-data-for-birmingham

Atos Case Study

Positioning paper



supporting vulnerable citizens

with multi-agency collaboration and data sharing



Atos / SME innovation supports Local Authorities, Police and Health Organisations to deliver citizen centric services for the potentially vulnerable

Blaenau Gwent County
Borough Council/Public
Sector partners

Multi Agency Data Sharing:
Vulnerability Intelligence
Project (VIS)



Vulnerability Intelligence Project

Scope of the Project

- ▶ To create a sustainable 'vulnerable information sharing hub' which provides the collation and presentation of data and information about vulnerable people
- ▶ To prove that sharing data was possible and would support partner agencies
 - **An independent review showed this was not be a barrier**
- ▶ Use data and information to provide key analysis and insight for strategic decision makers
- ▶ To enable public service organisations operating across regional boundaries to become more proactive and effective
- ▶ Delivered to an accelerated programme: **18 months**
 - Managed as a co-designed, joint working initiative – across five organisations
 - It featured use of an existing software application (Infoshare - SME)
 - Agile methodologies were core



Five organisations extracted data from their systems

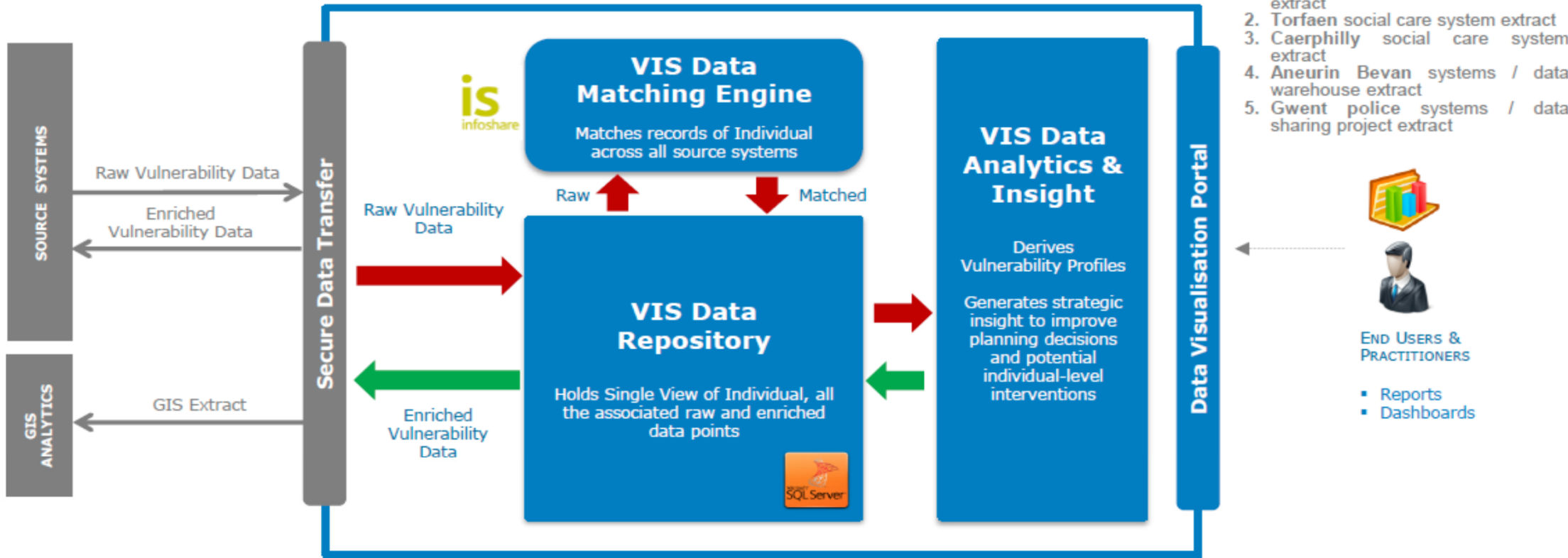
Containing demographic and contextual data considered relevant to vulnerability ~230k records

Data Provider	Data Source	Description of data	Number of Records
Blaenau Gwent CBC	Social Care system extract (case mgmt)	Adults and Children in contact with Social Care in the last five years	32,501
Caerphilly CBC			67,816
Torfaen CBC			49,646
Aneurin Bevan HB	Data warehouse extract	Adults and Children in Acute Care in the last five years	13,076
Gwent Police	Data sharing project extract	Victims of crime during previous six months	70,045



Example of Vulnerability Intelligence Service

High-Level Solution Overview



1. Blaenau Gwent social care system extract
2. Torfaen social care system extract
3. Caerphilly social care system extract
4. Aneurin Bevan systems / data warehouse extract
5. Gwent police systems / data sharing project extract

 = To be provided by BG & Partners

 = Core Solution: Matching + Analytics + Visualisation



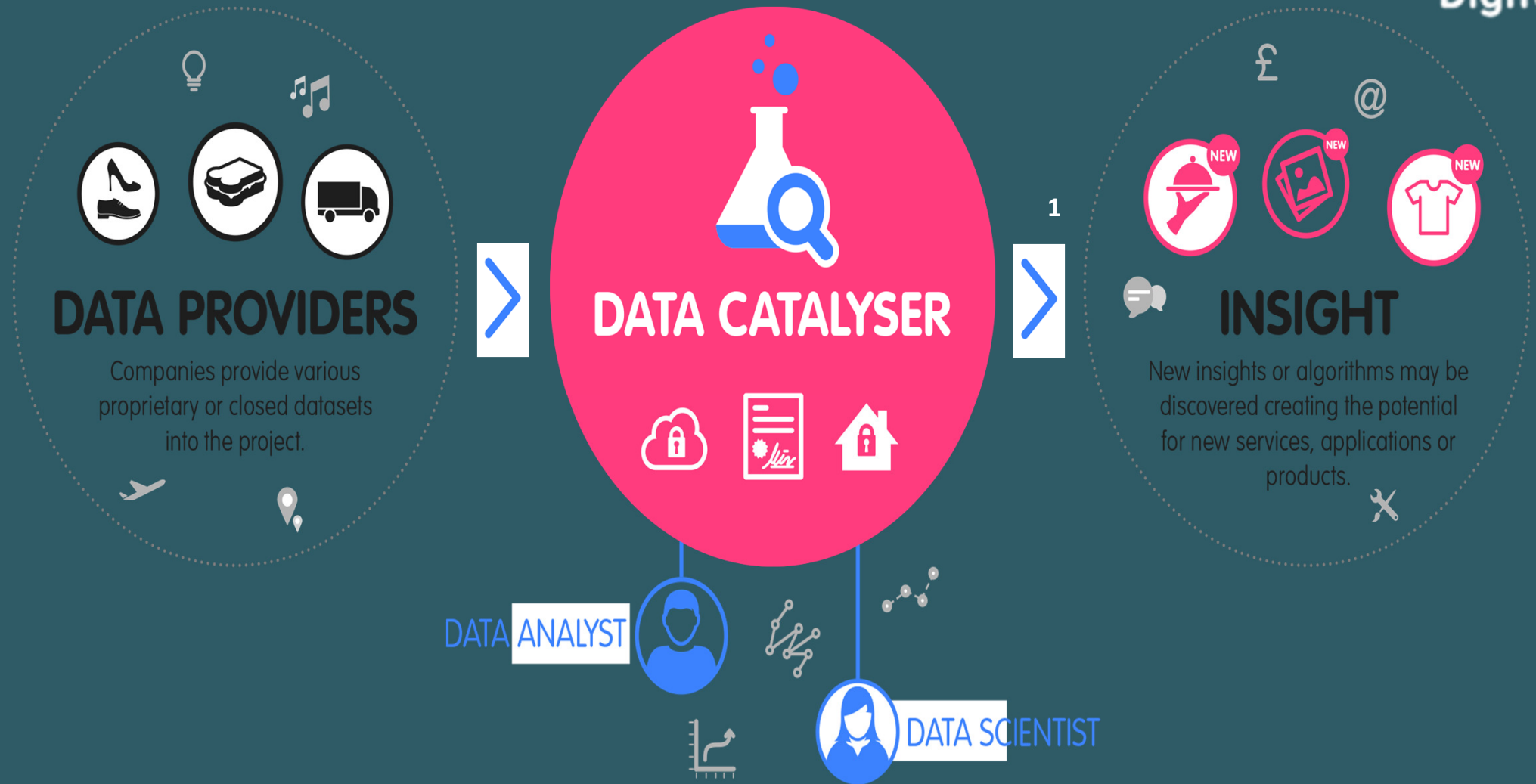
Tackling the challenges of personal and proprietary data; trust, privacy and security

The commercial benefits of a personal data sharing eco-system

- Personal data flows are the nervous system of any consumer facing business, they trigger the muscles to move when **acquisition**, **cross-sell** or **churn** events are identified.
 - As data becomes more abundant, this will be ever more critical to how “**core businesses**” compete in the future
 - Being timely and relevant reduces waste and cost, “50% of my marketing budget is wasted...” etc.
- Above all, it enables a **better customer experience** because organisations can be more responsive to their customers needs

CATAPULT
Digital

Data Catalyser Approach



- 1 Convene Data Providers
- 2 Provide project framework
- 3 Security is made available through a set of specific controls
- 4 A set of legal contracts defines the rules for all participants of the platform
- 5 Access to best of breed Insight Producers through a selection process
- 6 Overall, a data science solution built on enterprise grade tech

The opportunity is horizontal...

Vertical = Limited use cases eg fraud

Horizontal = Many use cases

For example:

- Mobile phone data to alert social care if patient is unexpectedly idle
- Shopping data maybe used to inform healthcare advice
- Bank data to inform targeting of retail offers e.g “bought broadband 12 months ago...so”



Breaking down the barriers

Building Trust:

Need to empower the customer:

Ethics:

Recognise & respect the consumer's wishes

Control:

Give tools/dashboards to enable real control

Compliance:

Verify orgs are sticking to the rules

Communication:

Kitemark to show whose in the ethical sharing club

Removing Friction:

Need to solve three sources of friction:

Technical:

How to define and physically transfer the data

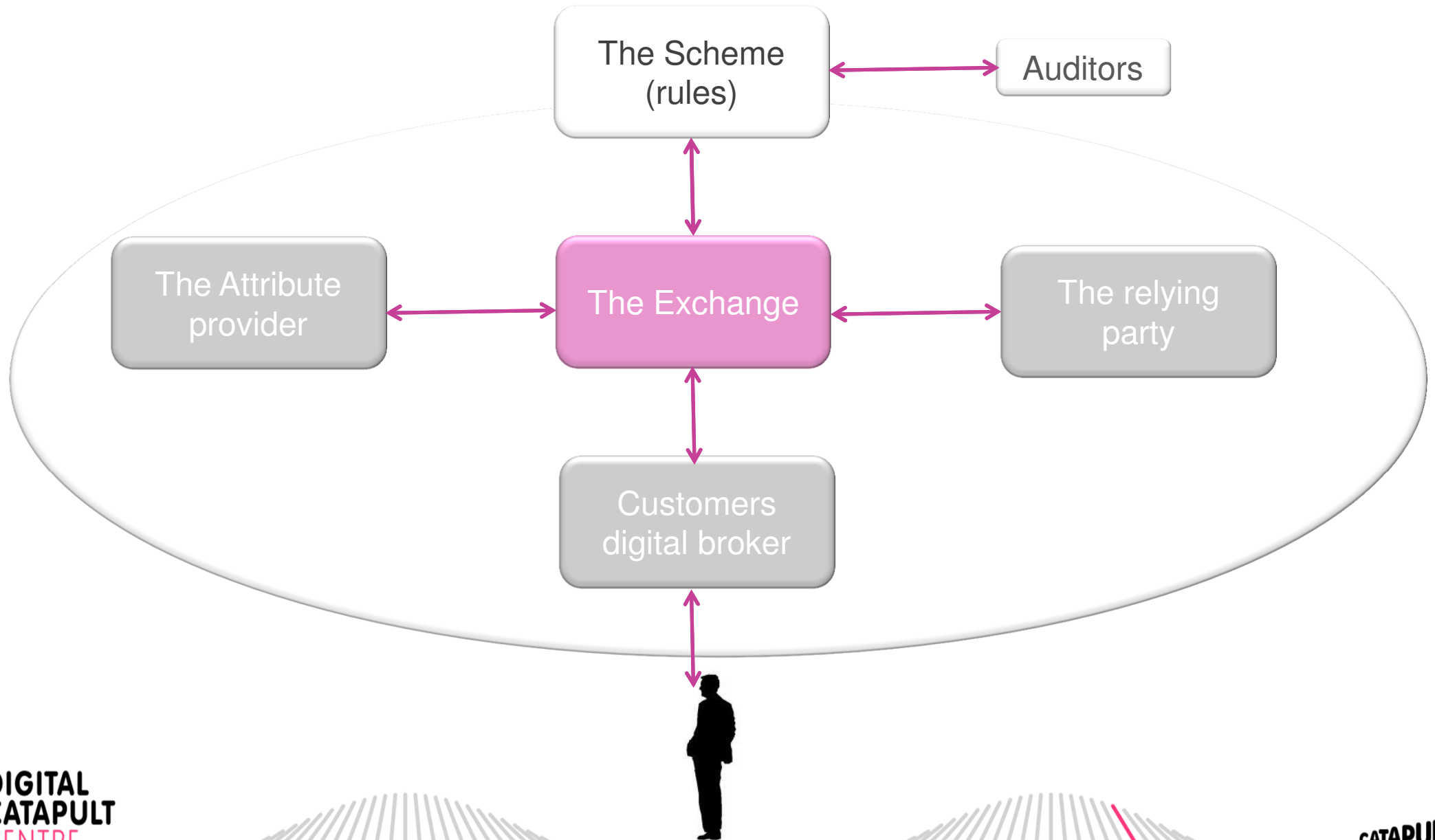
Legal:

How to establish the users identity and assert permission within each silo'd system

Commercial:

How to agree the price of access/transfer

Data Sharing & Trust Frameworks



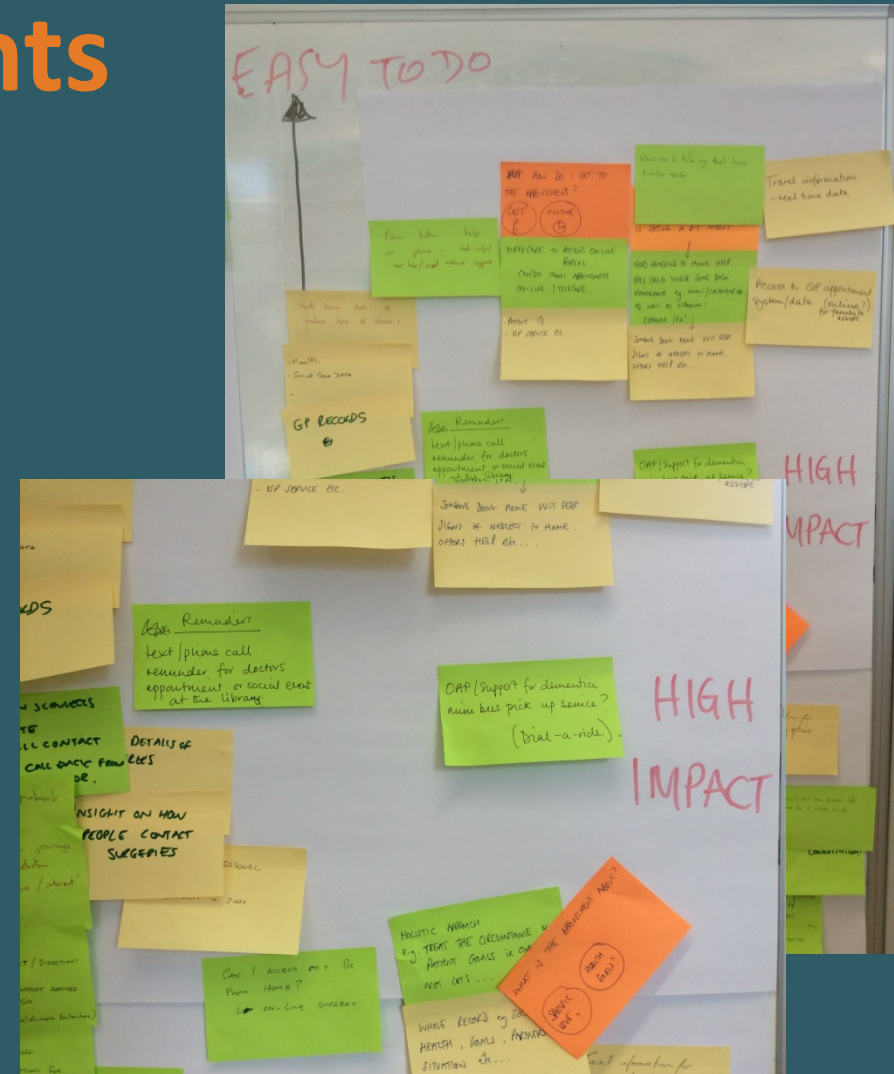
The Use Case

Meet Jim and Barbara Smith...



The Insights

- How citizens connect with GPs
- OAP/Dementia Support
- Dial-a-ride minibus pick up service
- Text/phone reminders for appointments
- Holistic approach
- Whole records focused on person not service
- GP appointment service at home/online
- Panic buttons/virtual care
- Real time travel info
- Services on demand/Just in time services
- Transport accessibility /intelligent mobility decisions
- Intelligent/joined up appointment systems



- Core principles need to be agreed
- Power & control to the individual
- Require a concrete need to focus activity
- Focus on prevention & intervention opportunities
- Prescriptive about data needs
- Data quality = KING
- Use of real time data
- Who's prepared to pay to procure innovation



Next Steps

- Briefing Paper submission
- Data Mapping Audit
- Identify the relevant data sets
- Organisations to engage partners to generate data
- Access/availability of data sets
- Build on existing data sharing agreements
- Define the activities

Small focussed activities will create the change and aid scalability and replicability