NestaGuest | seespark

@nesta_uk | #CityData

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City Data: from Analytics to AI

24 May 2018

Welcome

Eddie Copeland

Director, Government Innovation, Nesta

@EddieACopeland

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10:00 - Welcome
10:05 - What should be the UK's vision for local government's data?
10:20 - About today
10:30 - Offices of Data Analytics
11:10 - Predictive analytics for Scotland
11:20 - Morning break
11:50 - Assessing data maturity in local government
12:00 - Embrace the new or fix the plumbing?
12:40 - Lunch
13:40 - Future trends
13:50 - Data in the city: can a smart city also be a private city?
14:35 - Afternoon break
15:05 - Navigating the rights & wrongs of algorithmic decision making
15:45 - An AI to the future: what are the big public sector use cases for artificial intelligence and do we want them?
16:25 - Closing remarks
16:30 - Event close

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Housekeeping

Wifi: NestaGuest | seespark

#CityData

Slido.com | event code: CityData

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What should be the UK's vision for local government data?

Paul Maltby

Chief Digital Officer, Ministry of Housing, Communities and Local Government

@MaltbyPS

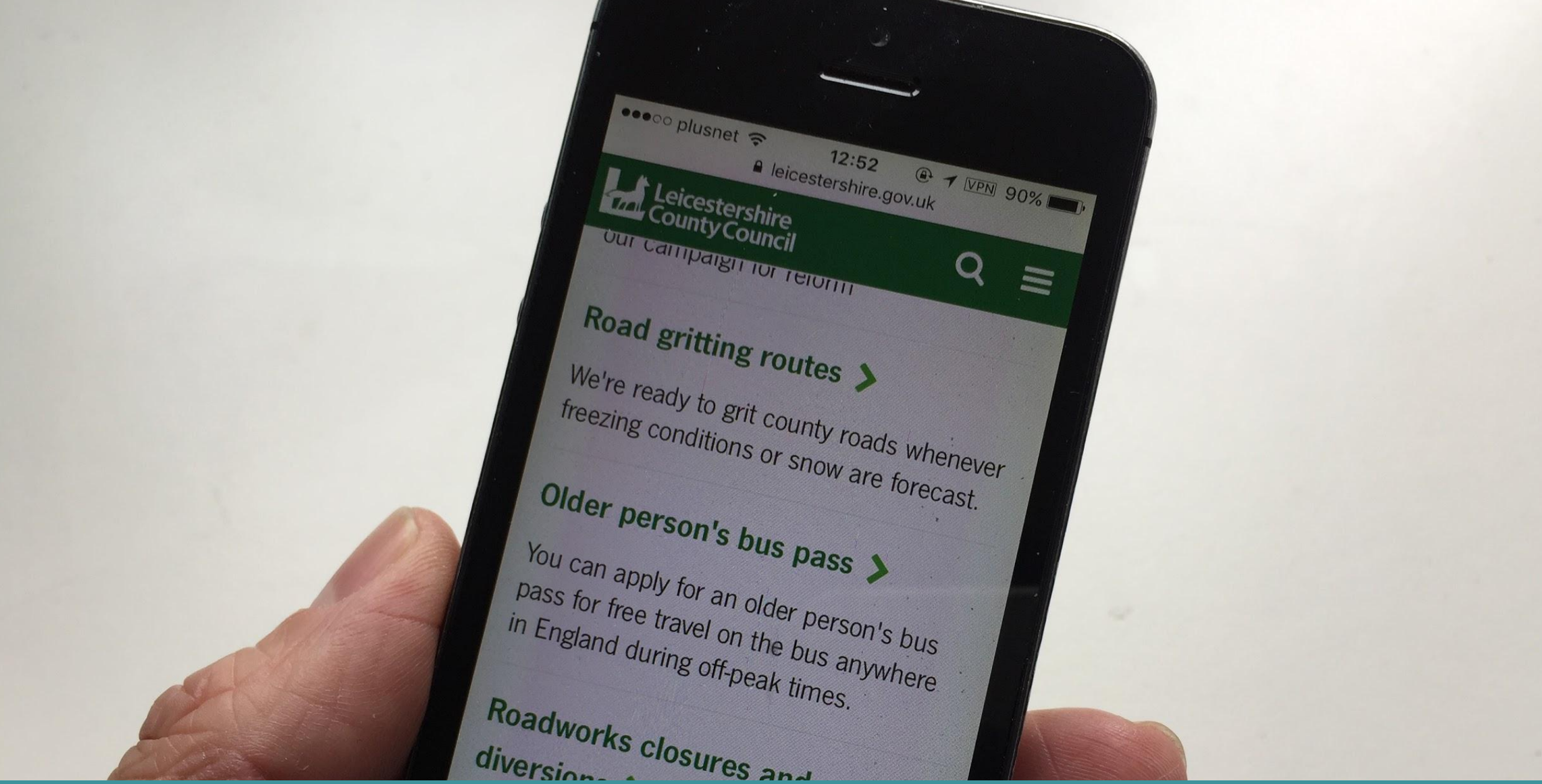
Ministry of Housing,
Communities &
Local Government

What should be the UK's vision for local government's data?

Paul Maltby
Chief Digital Officer
@maltbyps

TL:DR
It’s time to fix the plumbing

There is much to be optimistic about local digital service transformation


plusnet
12:52
leicestershire.gov.uk
VPN 90%
Leicestershire County Council
Road gritting routes
We're ready to grit county roads whenever freezing conditions or snow are forecast.
Older person's bus pass
You can apply for an older person's bus pass for free travel on the bus anywhere in England during off-peak times.
Roadworks closures and

Blog

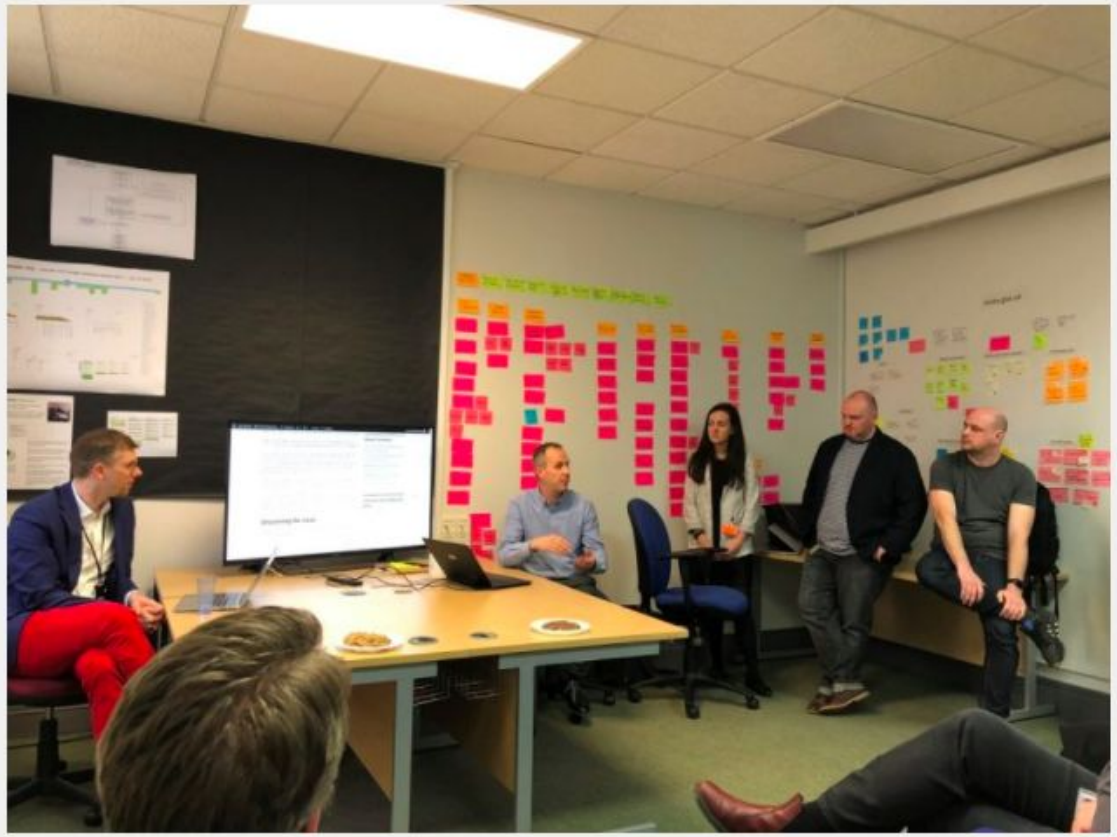
Service Design team

Search blog

Hello world - come work with us!

We are just at the beginning of our journey, and we're busy building teams to help us explore and deliver what a council of the future should be. We believe that by focussing on service design, putting user need at the heart of our thinking, then we can bring a real focus and impact on the challenges facing Essex.

Read more



Check your rent balance and other payments

See payments and charges on your current and previous properties.

You can:

- view your payments and charges for all the accounts on your current property, including rents, repairs, insurance, supported housing and garage charges
- view account balances for your previous properties

To check your rent balance, sign in to your Bristol Account or create one.

You'll need your 14 digit rent account number. You'll find this on your rent bill and letters.

Go to your account >

Create account >

Rent payments and arrears

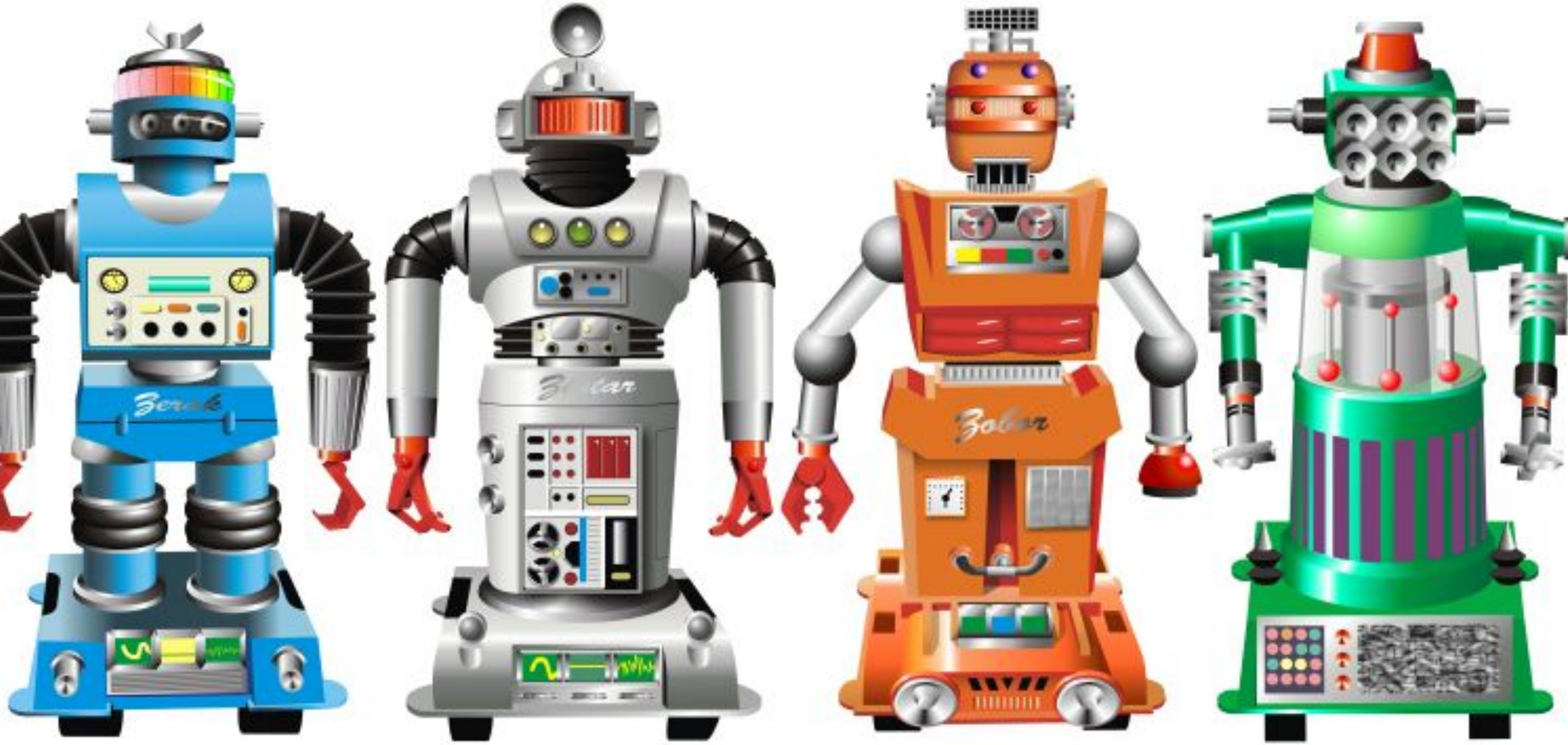
Pay your rent

Check your rent balance and other payments

Problems paying your rent

Rent and service charges

Rents general enquiry

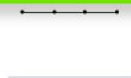
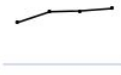
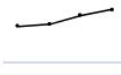


Before we get all robot-y let's refocus on the use cases for data in local gov

Registers
Transactions
Analysis
Automation

The Open Data Barometer

A global measure of how governments are publishing and using open data for accountability, innovation and social impact.

Country	Rank	Score OUT OF 100	Change	Score Trend OVER PAST EDITIONS	Readiness OUT OF 100	Implementation OUT OF 100	Emerging Impact OUT OF 100
United Kingdom See details	1	100	0 -		99	100	94
Canada See details	2	90	2 ▲		96	87	82
France See details	3	85	-1 ▼		100	71	88
United States of America See details	4	82	-2 ▼		96	71	80
Korea See details	5	81	3 ▲		95	59	100
Australia See details	5	81	5 ▲		85	78	78
New Zealand See details	7	79	-1 ▼		92	58	99
Japan See details	8	75	5 ▲		84	60	89
Netherlands See details	8	75	-1 ▼		94	64	68
Norway See details	10	74	7 ▲		77	71	73
Mexico See details	11	73	5 ▲		83	58	88
Spain See details	11	73	2 ▲		81	58	88
Denmark See details	13	71	-8 ▼		67	71	71

“SCOLAND UK”
“SCOTALND UK”
“SCOTKLAND UK”
“SCOTLAD UK”
“SCOTLAND”
“SCOTLAND UK”
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“SCOTLAND UNITED KINGDO”
“SCOTLAND UNITED KINGDOM”
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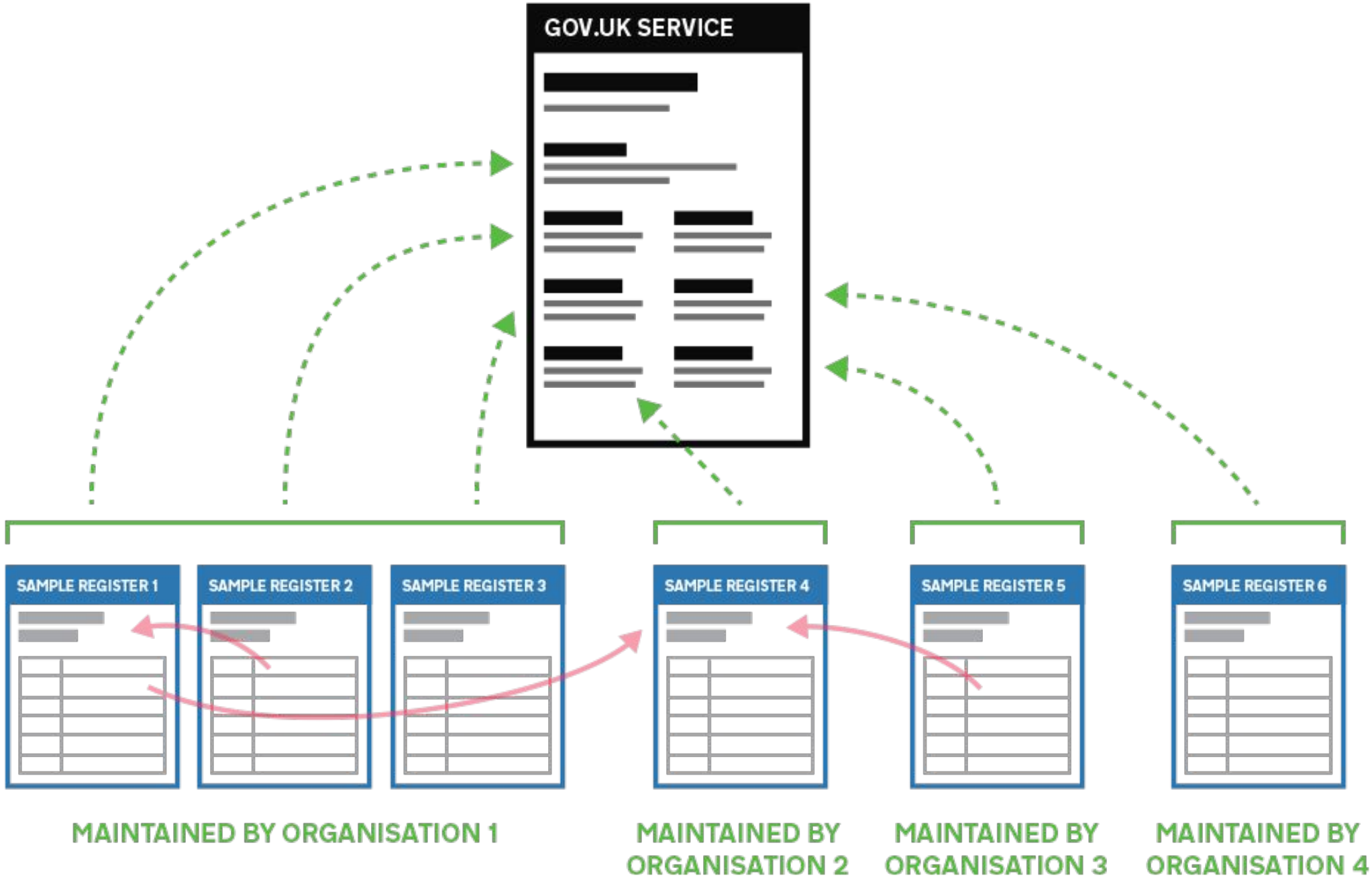
“SCOTLAND, UK”


GOV.UK SERVICE
SAMPLE REGISTER 1
SAMPLE REGISTER 2
SAMPLE REGISTER 3
SAMPLE REGISTER 4
SAMPLE REGISTER 5
SAMPLE REGISTER 6
MAINTAINED BY ORGANISATION 1
MAINTAINED BY ORGANISATION 2
MAINTAINED BY ORGANISATION 3
MAINTAINED BY ORGANISATION 4

Build services using accurate and up-to-date data

Use registers to build your service and get access to current and reliable data.

What registers are

Registers are lists of information. Each register is the most reliable list of its kind. For example, the Foreign and Commonwealth Office's (FCO's) country register is the most accurate and up-to-date list of countries available.

The benefits of registers

Using a register will mean you're only ever working with one reliable and current source of data. You can focus on building your service rather than checking if the data you're using from other sources is accurate and trustworthy.

Visit the register pipeline to see all of the registers ready to use, and the

Registers ready to use

country
local-authority-type
local-authority-eng
territory
internal-drainage-board
government-organisation
government-service
registration-district
prison-estate
local-authority-sct
principal-local-authority

Registers

Transactions

Analysis

Automation

Data access ≠ data sharing

Blog

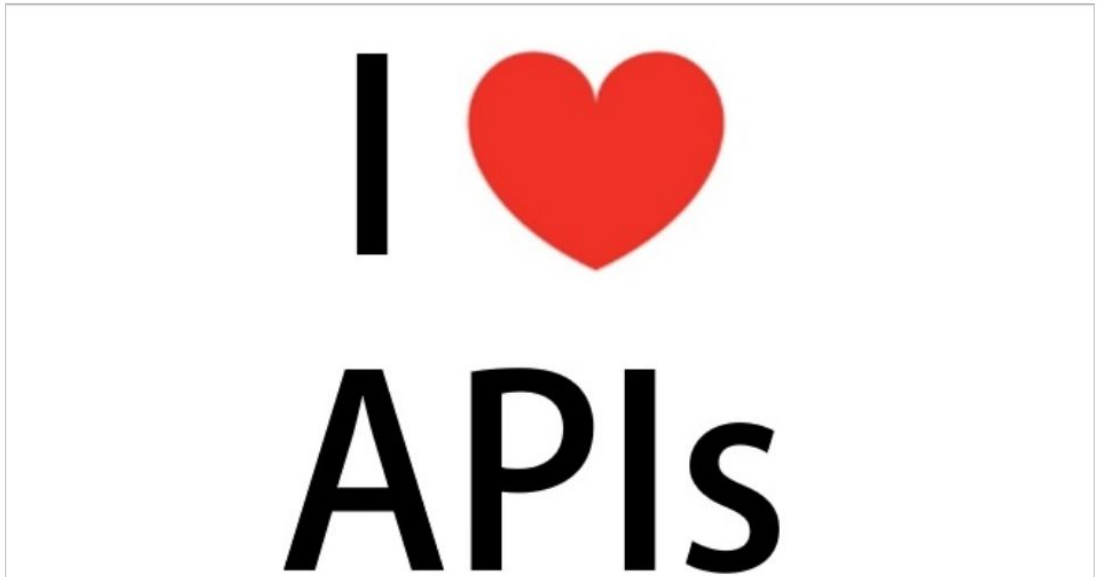
HMRC digital

Search blog

Organisations: HM Revenue & Customs

100,000,000 and we're just getting started

Lee Hawksworth, 7 December 2017 - APIs and third party software, Cross Gov Collaboration, Digital world, HMRC Digital Delivery Centres



HMRC digital jobs

As a digital employer with some of the best delivery centres in the UK and some of the biggest and most exciting digital projects in Europe we've got a lot to offer

Why work for HMRC digital?
Current vacancies

Industrial Placements 2018

Our vacancies page is updated regularly but if there's nothing suitable for you right now please send us your CV to consider
(This is for individuals only – NOT recruitment agencies)

HMRC digital jobs skills and

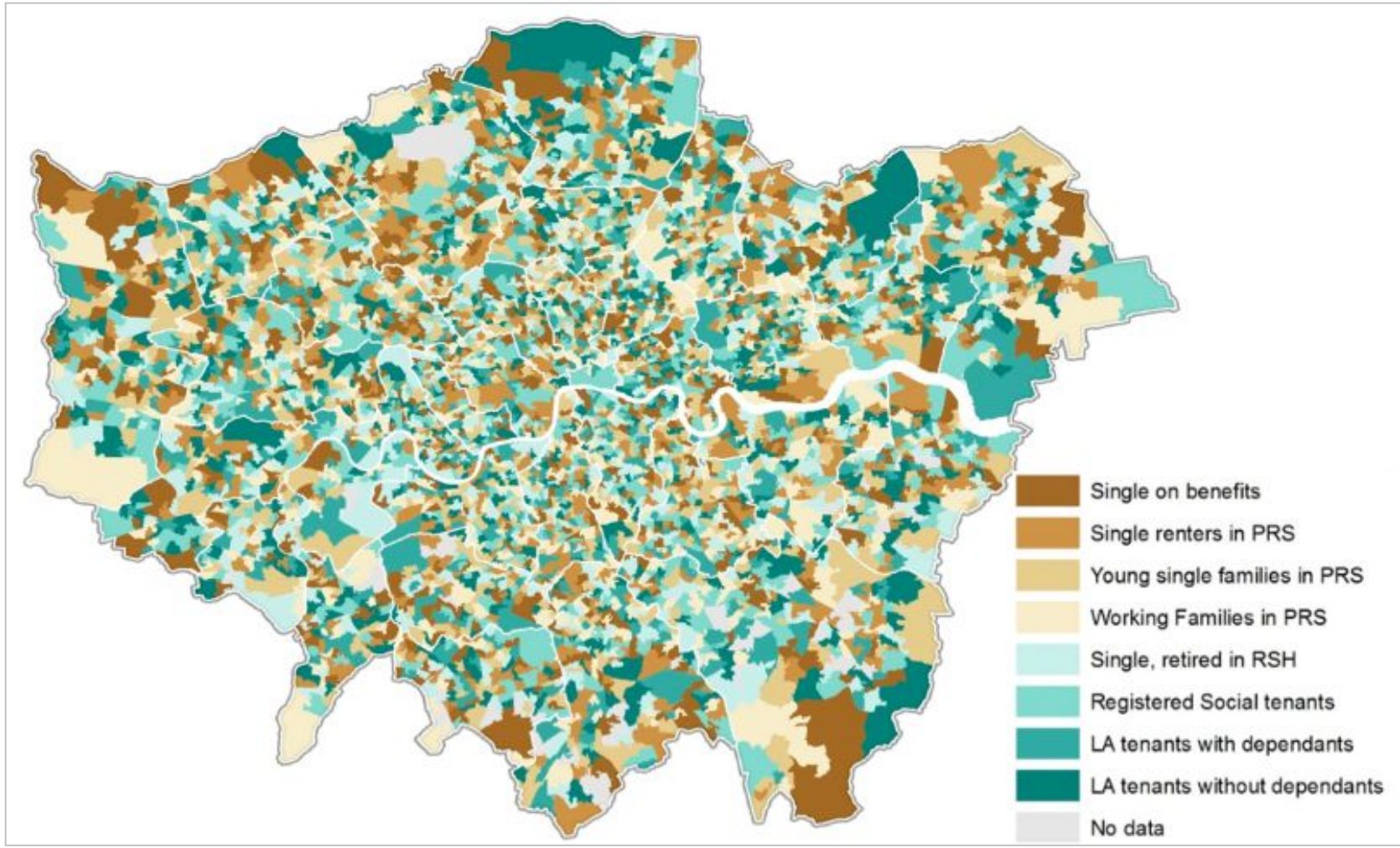
Registers
Transactions
Analysis
Automation

Blog

Data in government

Alan Lewis (Greater London Authority) wanted to identify where housing benefit claimants live, and whether the pattern is changing, in order to improve local authority budget forecasting.

Alan went on to apply a pattern recognition technique (k Nearest Neighbours) to investigate how the clusters have changed and to explore any correlations in their distribution.

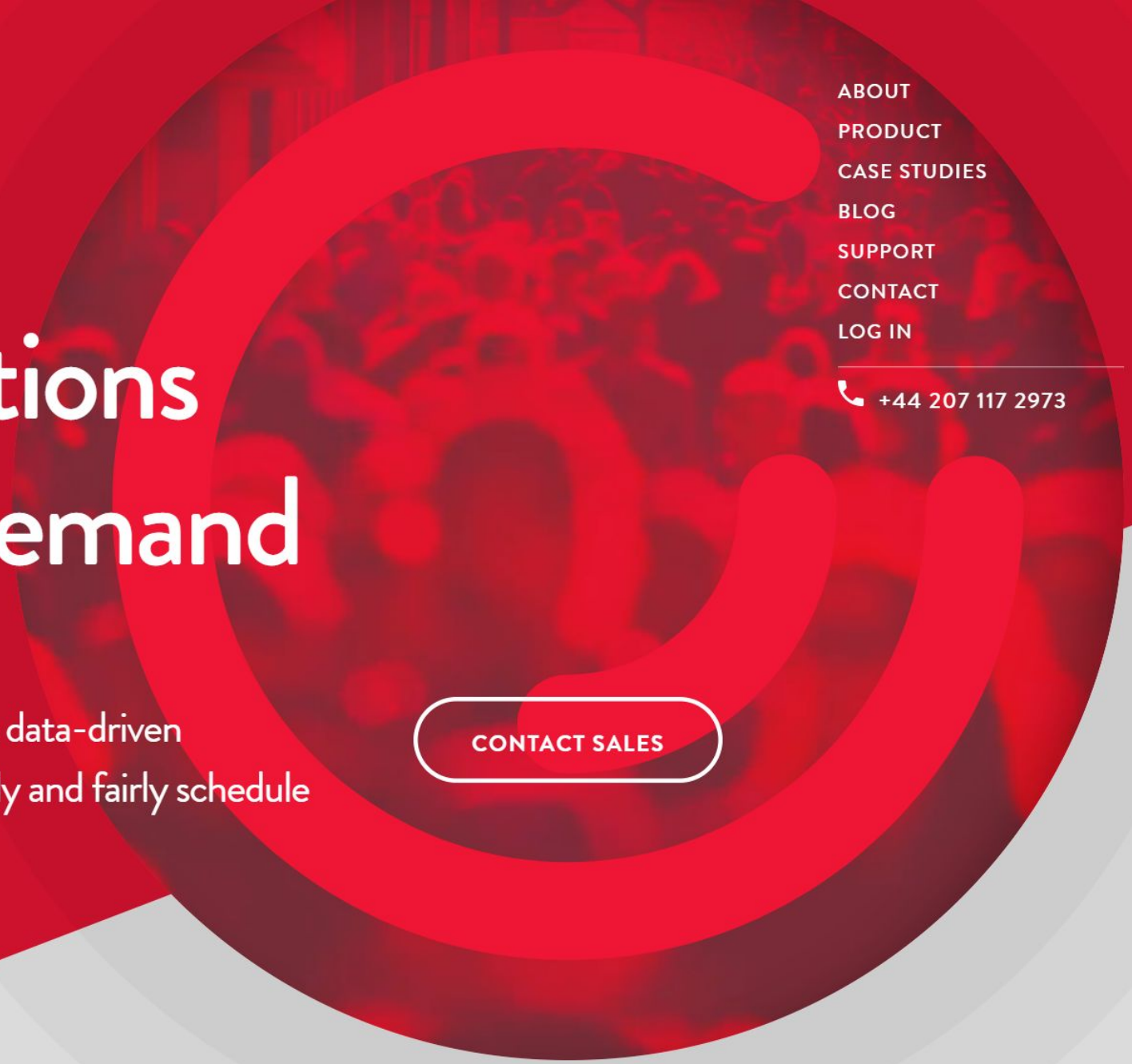


Registers
Transactions
Analysis
Automation

rotageek

+44 207 117 2973

Helping organisations predict & meet demand



Rotageek uses predictive data-driven technologies to effectively and fairly schedule staff

CONTACT SALES

About the GovTech Catalyst

GovTech aims to encourage small, emerging technology businesses to create and develop innovative solutions to public services, that once proven can move to scale both to the advantage of markets and society.

GovTech Catalyst competitions help the public sector identify and work with cutting edge technology firms. They use the SBRI process, supported by Innovate UK.

Round 1 competition schedule

We'll add dates and links as the competitions launch:

- Identifying Daesh still imagery (open 14 May to 27 June 2018)
- Tracking waste through the waste chain (opening June 2018)
- Tackling loneliness and rural isolation (opening July 2018)
- Cutting traffic congestion (opening August 2018)
- Deploying smart sensors on council vehicles to improve services (opening September 2018)

What is MHCLG doing to help?

Local digital

LocalGovDigital
localgovdigital.slack.com

Apply for a resident's parking permit

This is a local government service design pattern for council teams.

Overview

1. Awareness
2. Check
3. Start
4. Eligibility
5. Permit
6. Payment
7. Notifications
8. End

Overview

Policy | Research | Design | Code

Residents need a place to park their car near their home. Parking permit services make sure there are parking spaces available for residents. They make it illegal to park in some areas without a permit.

There is no national policy for parking permit schemes, so councils should work out how much need there is for parking restrictions and deliver the service in response to that need.

What do councils need from users to provide this service to them?

Depending on the local authority's needs, users may be asked to provide:

- the postcode of the area where they want to park
- proof they live in the area
- the registration number of the vehicle(s) they are applying for permits for
- payment

Digital Land

Better data will help diversify the housing and planning system

But... so much data we need is hard to find and inaccessible

Search results

tree preservation orders

Filter by

Publisher

Topic

Format

Open Government Licence (OGL) only

Apply filters

Remove filters

1,638 results found

Best match

Tree Preservation Orders - Trees

Published by: Norwich City Council

Last updated: 10 February 2016

A Tree Preservation Order (TPO) is an order made by the local planning authority in respect of trees or woodlands. The principal effect of a TPO is to prohibit the: cutting down, uprooting,...

Tree Preservations Orders - Trees

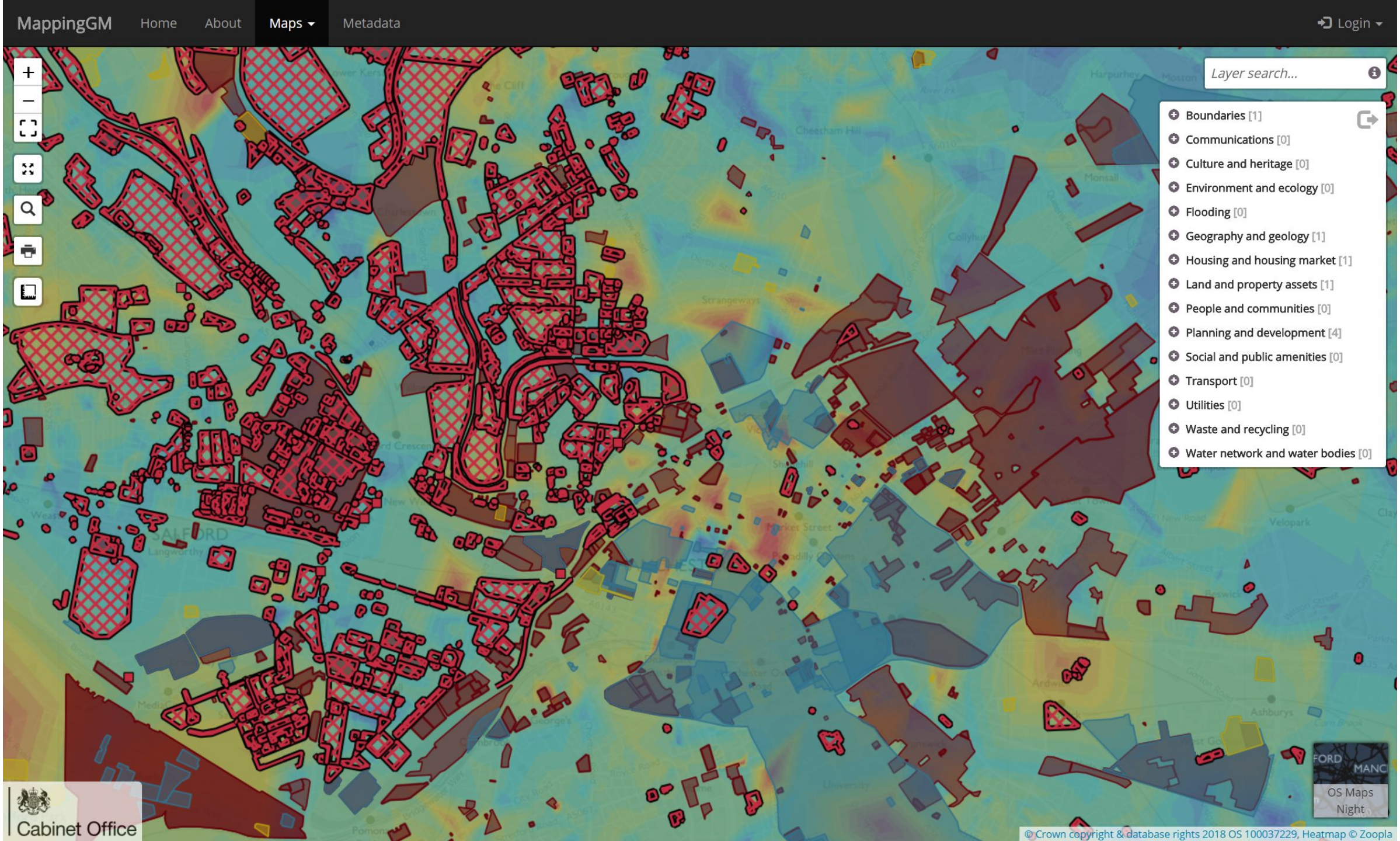
Published by: Milton Keynes Council

Last updated: 10 February 2016

Location of protected trees in Milton Keynes

Tree Preservation Order individual trees

Published by: London Borough of Hammersmith and Fulham


MappingGM
Home
About
Maps
Metadata
Login
Layer search...
Boundaries [1]
Communications [0]
Culture and heritage [0]
Environment and ecology [0]
Flooding [0]
Geography and geology [1]
Housing and housing market [1]
Land and property assets [1]
People and communities [0]
Planning and development [4]
Social and public amenities [0]
Transport [0]
Utilities [0]
Waste and recycling [0]
Water network and water bodies [0]
OS Maps Night
Cabinet Office
© Crown copyright & database rights 2018 OS 100037229, Heatmap © Zoopla

LandInsight

Product | Learn More | Pricing | About | Contact | Free Trial | Sign In

Discovery is in the details

Land insight makes it easier and clearer to find the off-market development land and property leads worth knowing about. You will have instant access to ownership details, planning history, environmental constraints, comparables and more.

In one convenient and easy-to-use web-based app, you will be able to assess the viability of any plot of land or property, save and monitor spaces of interest, receive notifications about any changes, and share leads with colleagues at the click of a button.

http://www.landinsight.io/

Make an event like this

Sign in

What land and housing data do you need?

Newspeak House | 30th May, Drop in 12.30pm - 5pm

You're attending

https://attending.io/events/what-land-and-housing-data-do-you-need

You and 21 people are attending

Some final thoughts

1. You can’t bolt AI onto legacy systems & mindsets

2. Digital/data awareness is a mainstream leadership issue

It is somehow still socially acceptable for leaders to say they don't understand the changes that are being brought into our lives by digital technology, as though it's some kind of niche topic that only specialists need bother themselves with. Digital technology isn't niche — it affects most aspects of our lives, and most aspects of the strategy and operations of most organisations.

Janet Hughes, DotEveryone

3. Data ethics isn’t optional

1. Start with clear user need and public benefit
2. Use data and tools which have the minimal intrusion necessary
3. Create robust data science models
4. Be alert to public perceptions
5. Be as open and accountable as possible
6. Keep data secure

https://www.gov.uk/government/publications/data-science-ethical-framework

Thanks

Paul Maltby

@maltbyps

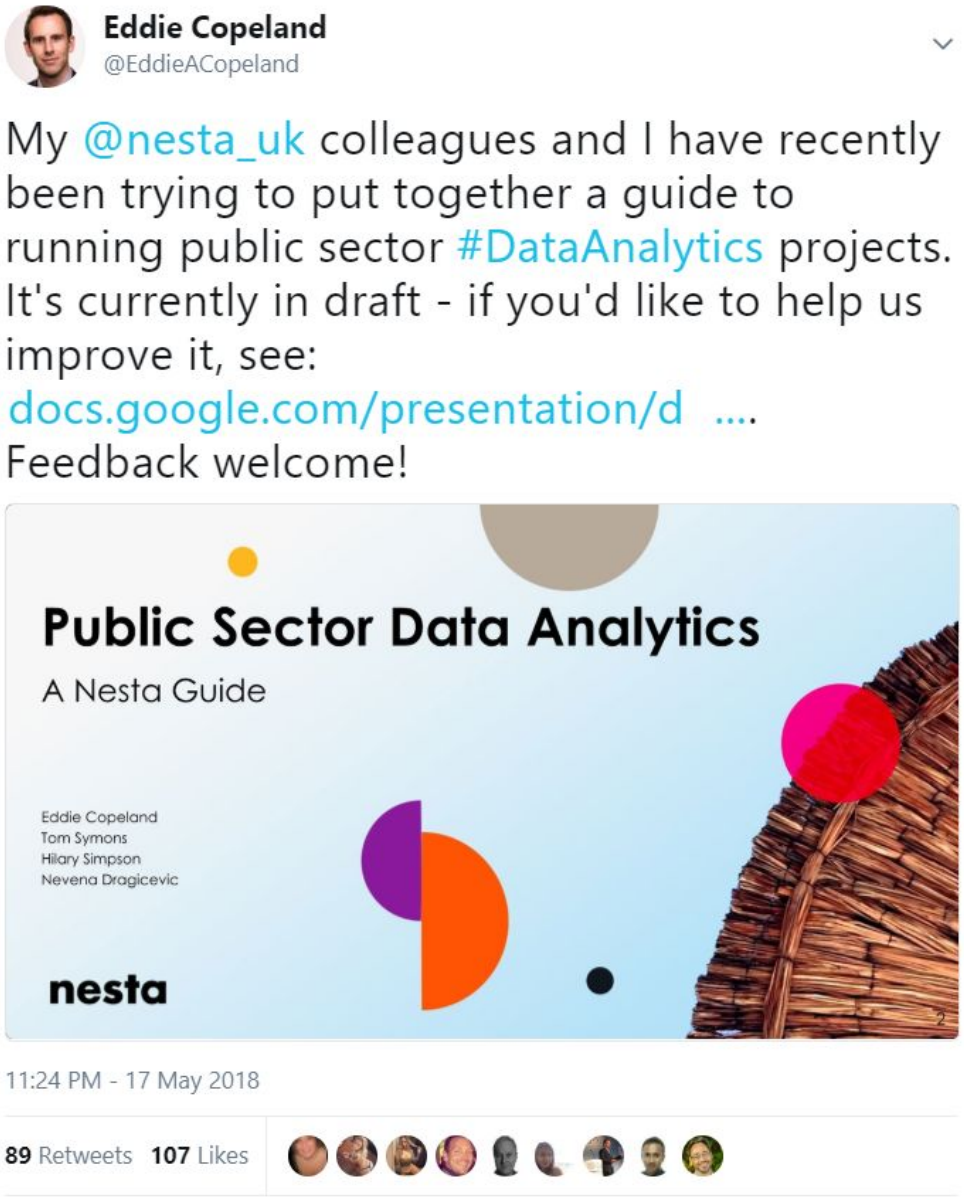
About today

Sli.do | event code: CityData

Eddie Copeland

Director, Government Innovation, Nesta

@EddieACopeland



View our draft guide to public sector data analytics:

bit.ly/nestadataguide

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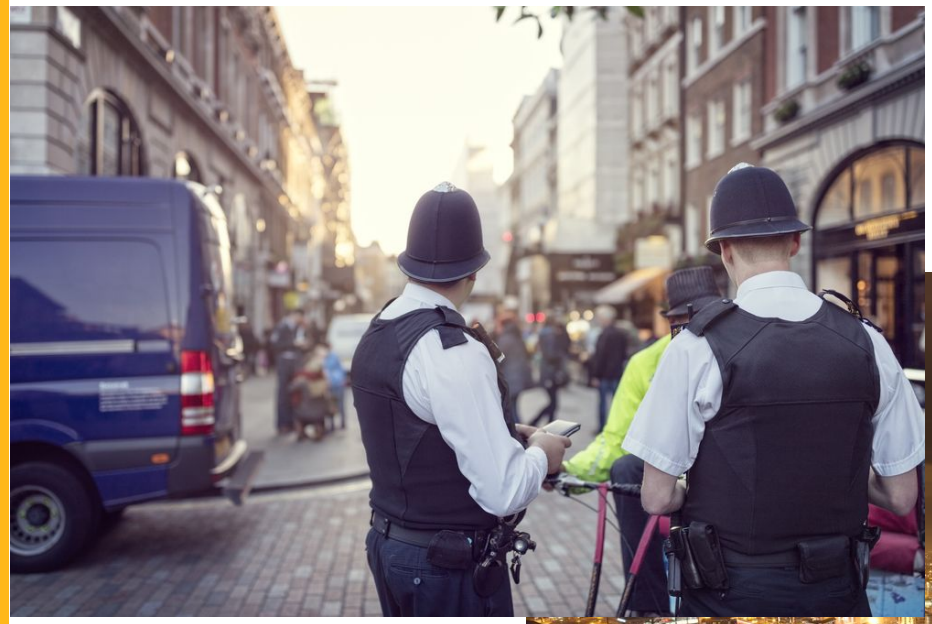
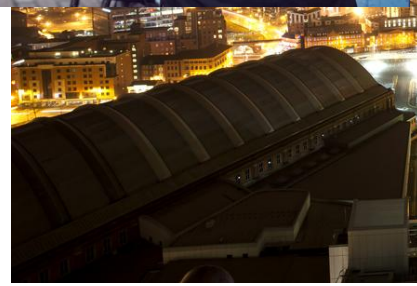
Data Intervention Library





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Discussion Breakouts for City Data Conference

Morning break:
Your data initiatives
New technologies
Working with the tech sector
Offices of Data Analytics

Lunchtime:
Your data initiatives
New technologies
Working with the tech sector
Data Maturity Interactive Tool
Using algorithms

Afternoon:
Your data initiatives
New technologies
Working with the tech sector
Use cases for AI

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Offices of Data Analytics: what are they and why do we need them?

Eddie Copeland, Director, Government Innovation, Nesta

Steve Skelton, Strategic Head of Policy and Information Services, Stockport Council

Dr Vicki Harrington, Director, Strategic Change, Essex Police

Neil Crump, Chief Data Officer, Worcestershire Office of Data Analytics

Paul Hodgson, GIS and Infrastructure Manager, Greater London Authority

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Predictive analytics in Scotland

Kathryn Paterson, Improvement Lead, Single Health and Work Gateway, Scottish Government

Stephen Smith, Statistician, Scottish Government

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Data Science in Scotland

Stephen Smith and Kathryn Paterson

Scottish Government
Riaghaltas na h-Alba
gov.scot

Scotland’s Data Science Accelerator

- Matching messy text to Standard Occupation Classifications (National Records of Scotland)
- Detecting buildings in historic maps (Registers of Scotland)
- Burden of disease in Scotland for over 100 conditions and injuries (NHS:Information Services Division)

Crop Map of Scotland Project (Scottish Government)

- An initial look at remote sensing data (borrowing a method from Rural Payments Agency in England)
- Satellite data and machine learning to classify areas by type of land cover (crops, woodland, grass, etc.)

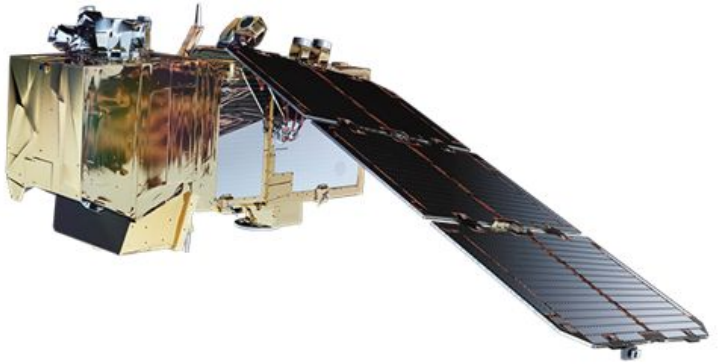
Remote Sensing data from European Space Agency

- http://www.copernicus.eu/

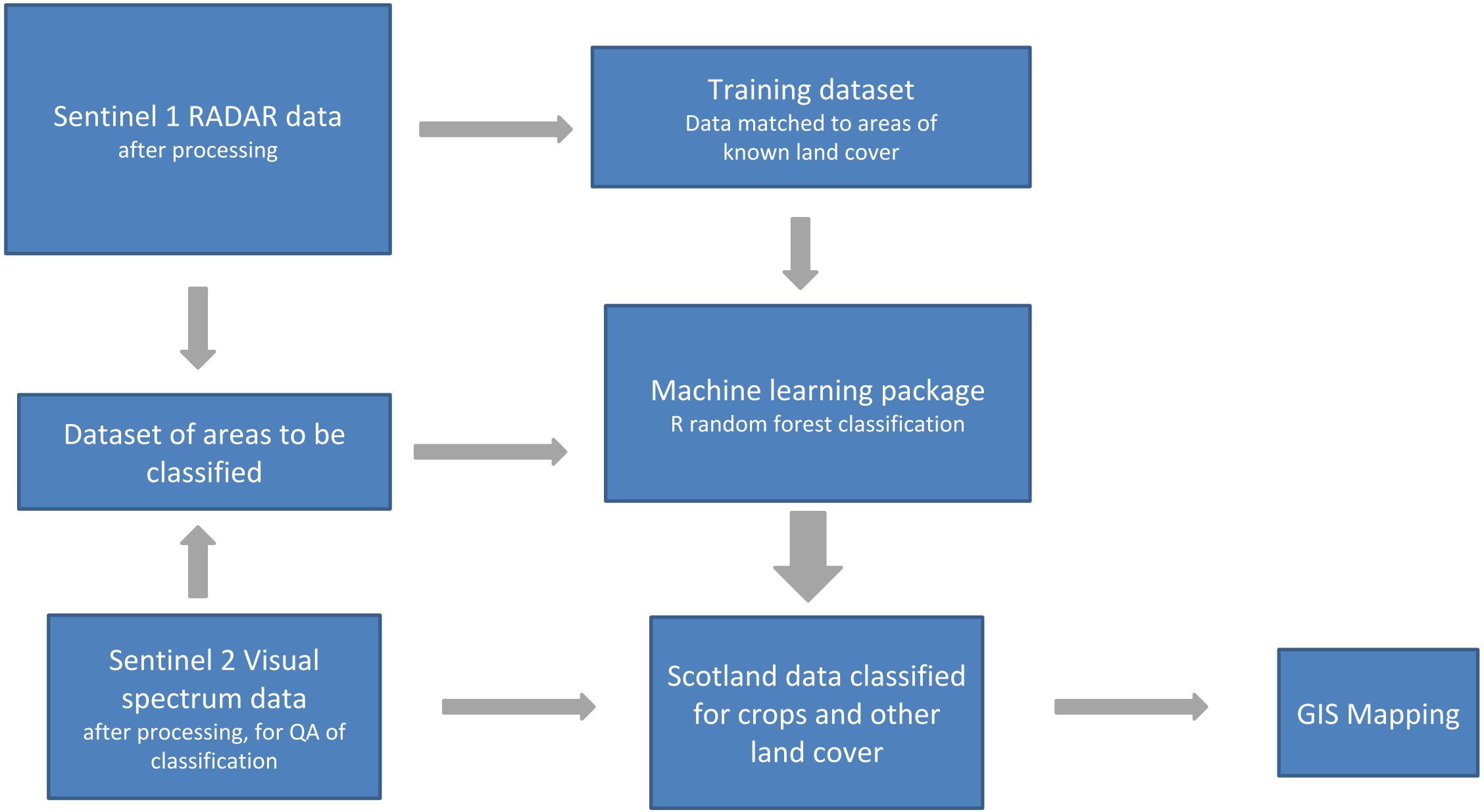
Sentinel 1

RADAR imagery

Sentinel 2



Visual spectrum imagery


Sentinel 1 RADAR data
after processing
Training dataset
Data matched to areas of known land cover
Dataset of areas to be classified
Machine learning package
R random forest classification
Sentinel 2 Visual spectrum data
after processing, for QA of classification
Scotland data classified for crops and other land cover
GIS Mapping

Output should look similar to CROME from the Rural Payments Agency below

Potential uses of Remote Sensing data in the future

- Replace some paper and telephone surveys of data on crops, crop yields and land cover
- Track changes in land use post Common Agricultural Policy

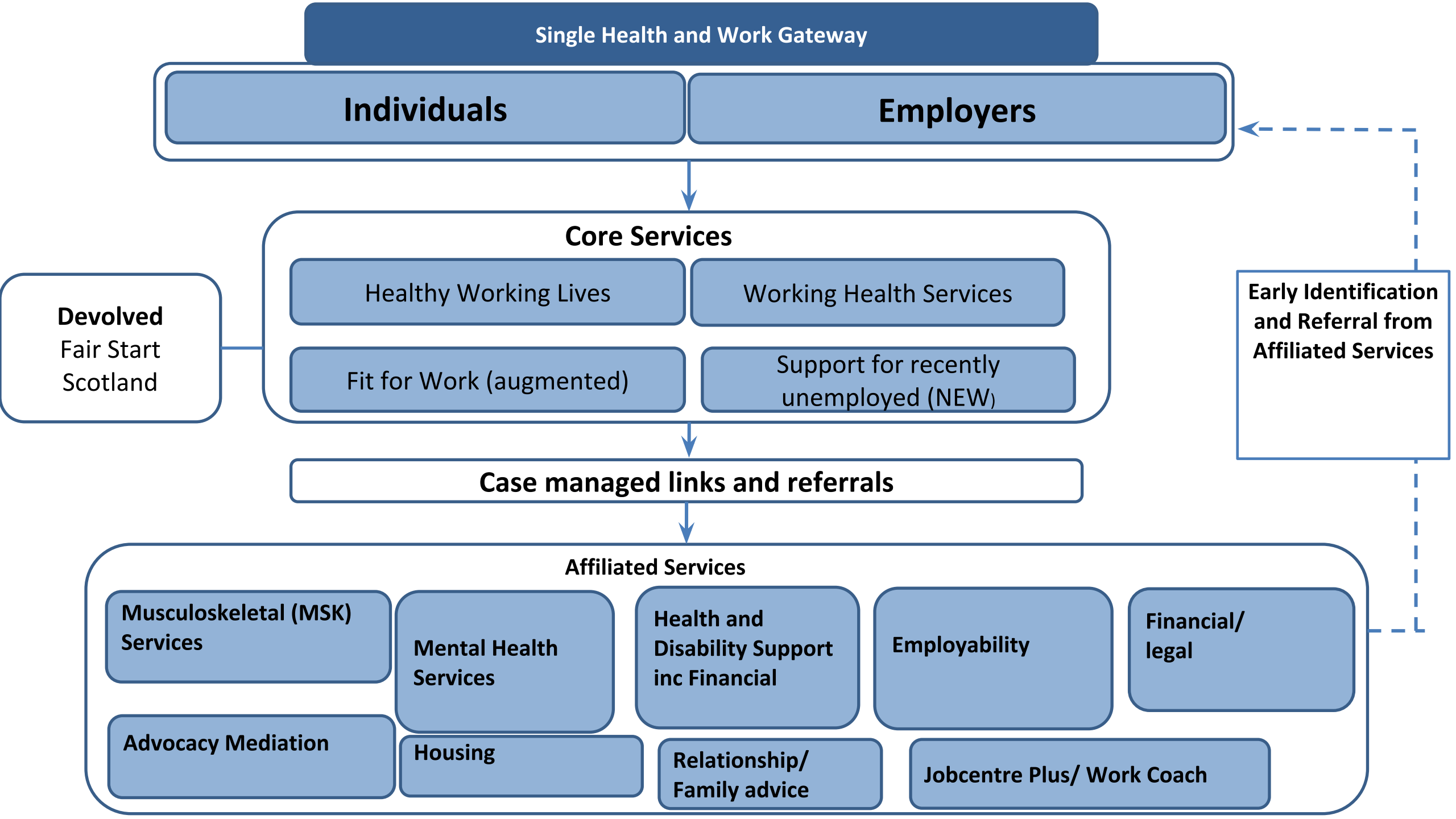
Single Health and Work Gateway


THIS WAY
THAT WAY
ANOTHER WAY

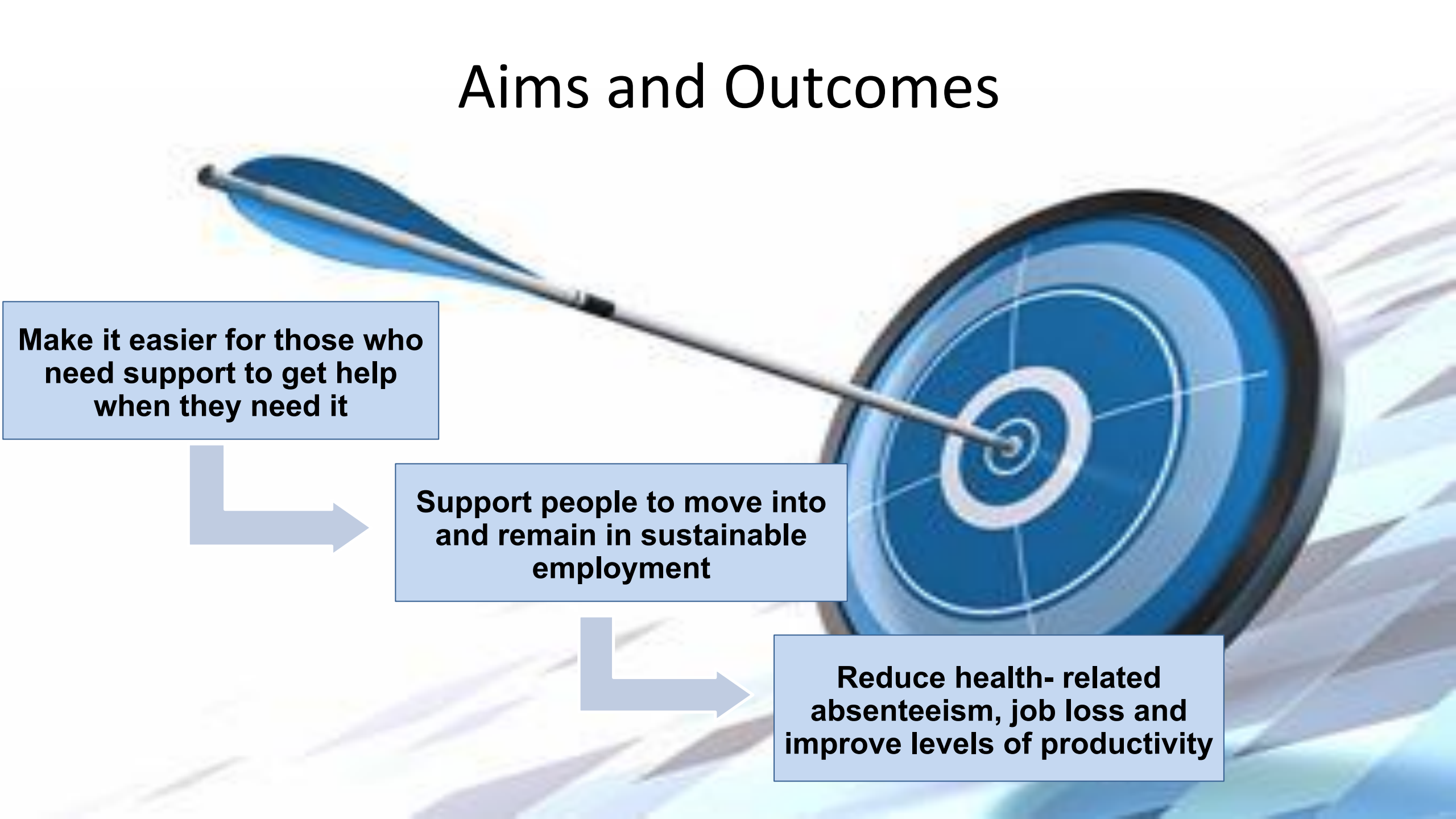
Core components of the pilot

- Integration and Alignment Core Health and Work services
- Improvement work with affiliated services to drive people to the Gateway (includes marketing and awareness tests of change)
- Evaluation
- Predictive analytics tool


SMS


Single Health and Work Gateway
Individuals
Employers
Core Services
Healthy Working Lives
Working Health Services
Fit for Work (augmented)
Support for recently unemployed (NEW)
Devolved
Fair Start Scotland
Early Identification and Referral from Affiliated Services
Case managed links and referrals
Affiliated Services
Musculoskeletal (MSK) Services
Mental Health Services
Health and Disability Support inc Financial
Employability
Financial/ legal
Advocacy Mediation
Housing
Relationship/ Family advice
Jobcentre Plus/ Work Coach

Aims and Outcomes

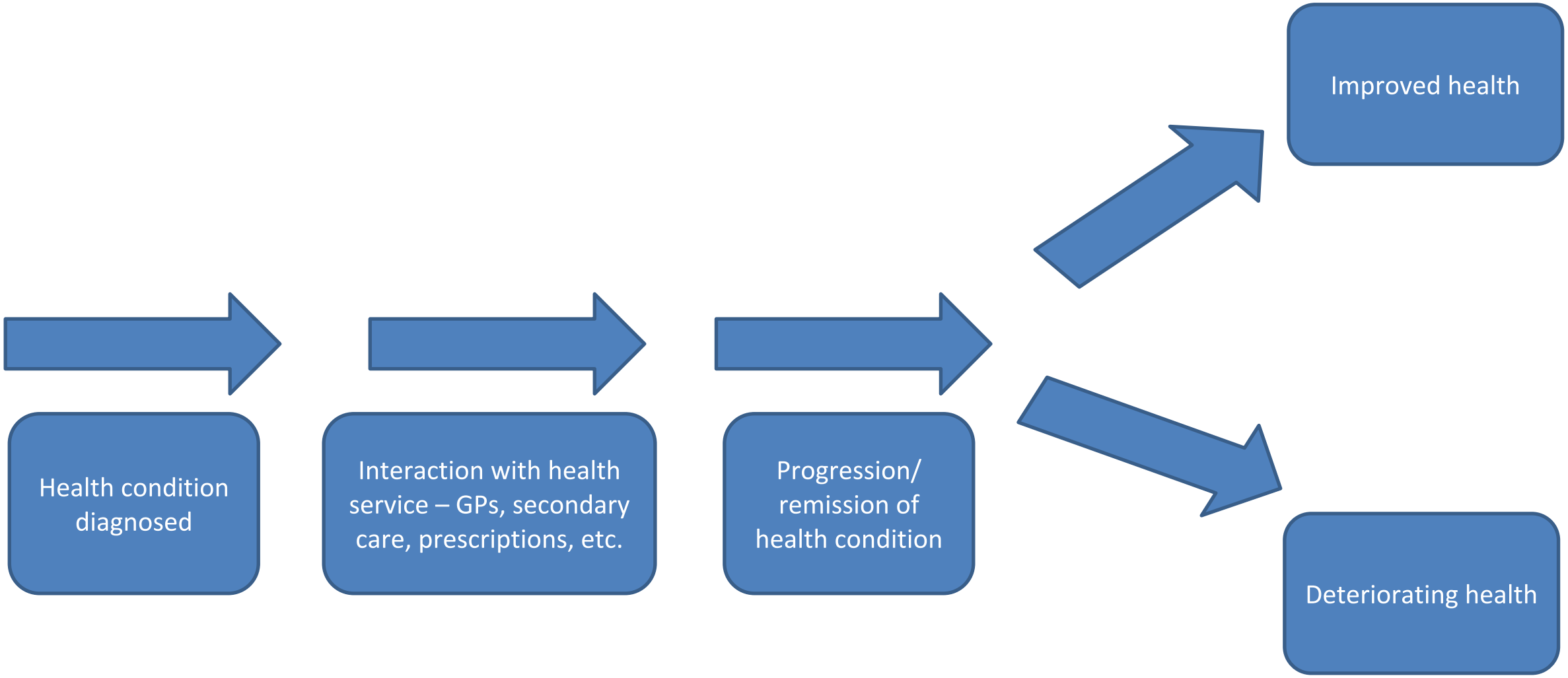


Make it easier for those who need support to get help when they need it

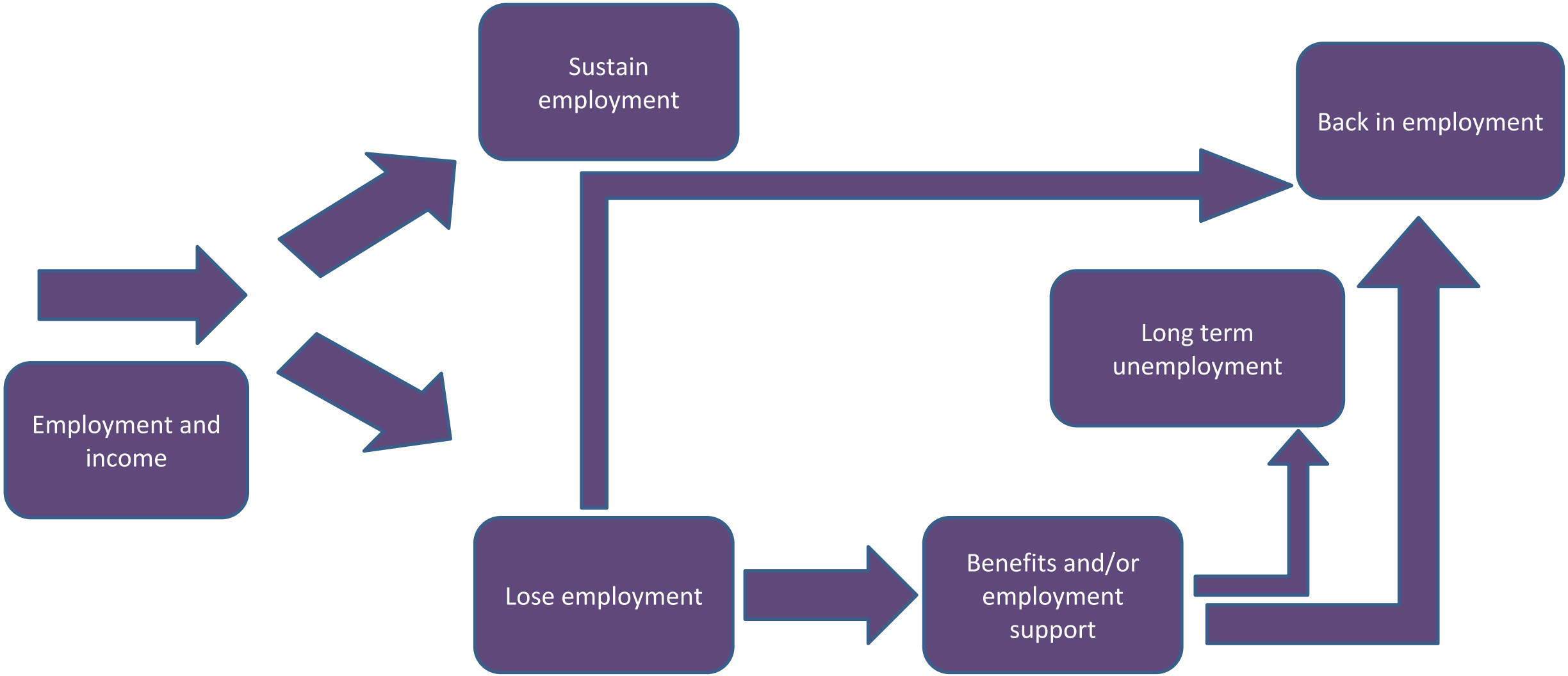
Support people to move into and remain in sustainable employment

Reduce health- related absenteeism, job loss and improve levels of productivity

Health datasets

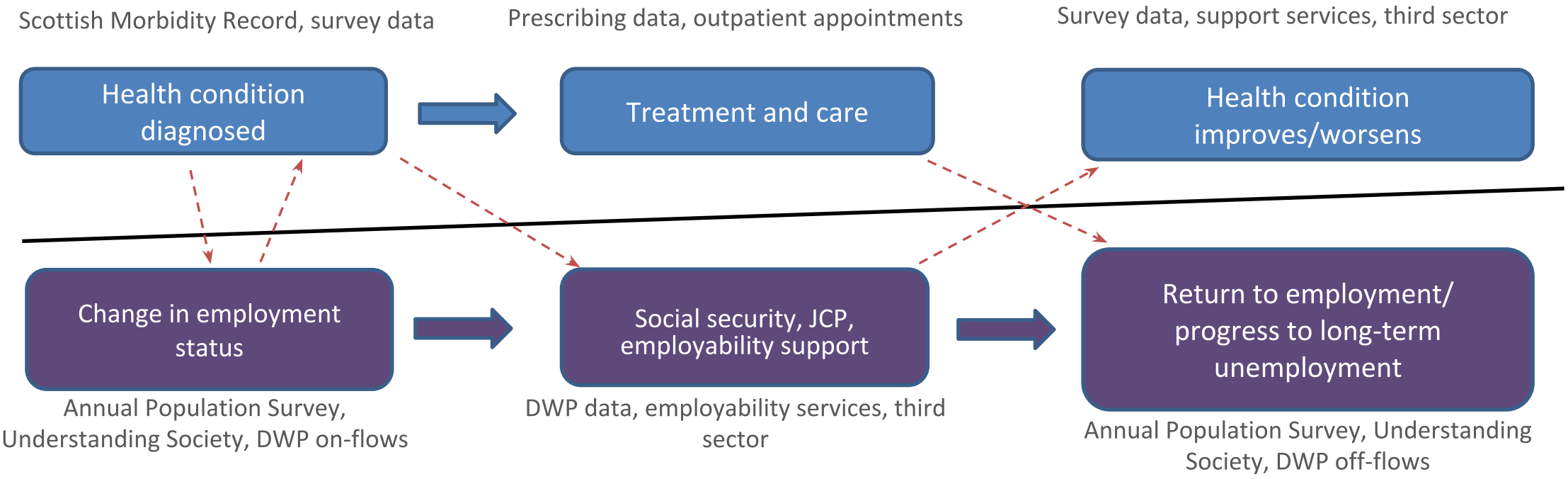


Employment and income datasets

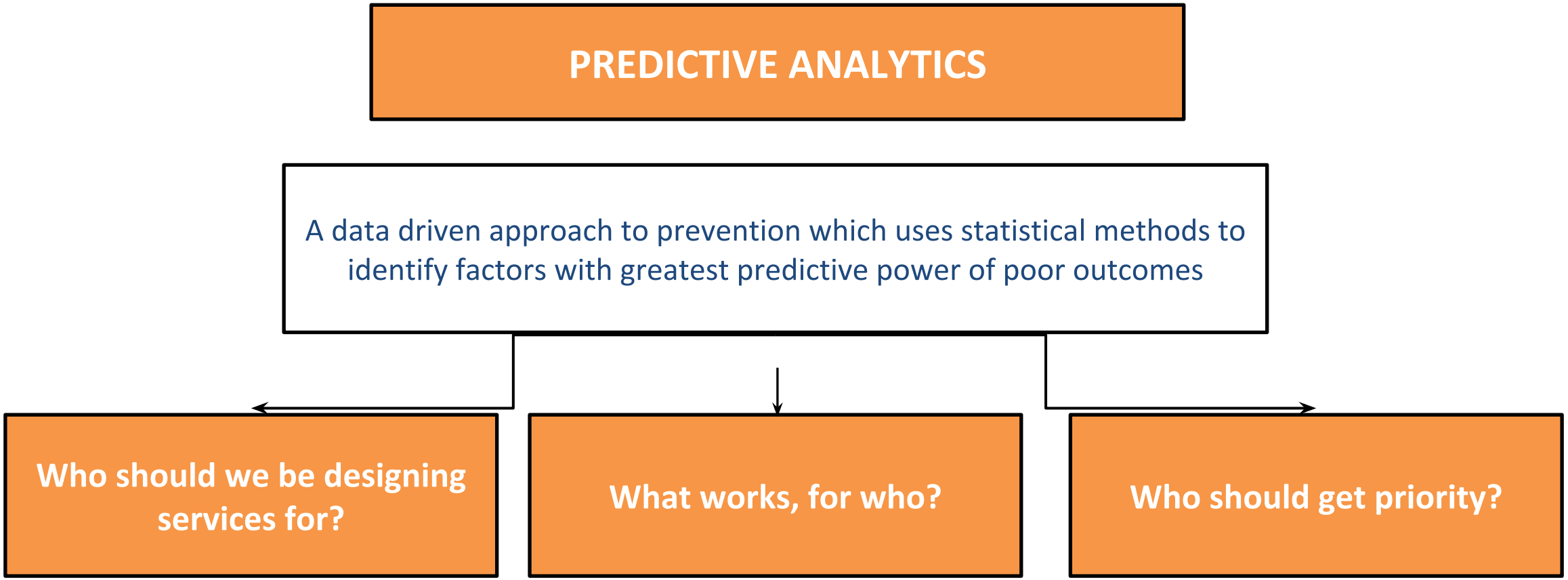


Linking data to improve predictive power

Health Data



Employment Data


PREDICTIVE ANALYTICS
A data driven approach to prevention which uses statistical methods to identify factors with greatest predictive power of poor outcomes
Who should we be designing services for?
What works, for who?
Who should get priority?

Questions?

stephen.smith@gov.scot
kathryn.paterson@gov.scot

Scottish Government
Riaghaltas na h-Alba
gov.scot

FutureFest

by nesta

futurefest.org @futurefest #FutureFest18

OCCUPY
THE
FUTURE

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2018

Act today to create your tomorrow

The line-up features: Ruby Wax, Paul Mason, Nick Clegg, Imogen Heap and Akala.

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Refreshments and networking

Conversation points:

1. Your data initiatives
2. New technologies
3. Working with the tech sector
4. Offices of Data Analytics

Assessing data maturity in local government

Tim Adams

Programme Manager, Data and Transparency, Local Government Association

@DrTimAdams

Developing data maturity in local government

Tim Adams
Programme Manager (LGA)
@DrTimAdams

May 2018

www.local.gov.uk/lginformplus

The impact of austerity

Loss of 75p of every £1 of core funding between 2015 & 2020

Headcount reduced by 25% 2012 to 2017

Direct impact on research and data analysis functions

Councils face an overall £5.5 billion funding gap by 2020

Better use of data programme 2018

Councillor training, webinars or eLearning

“Intelligent Council” Knowledge resource

Research/data skills “dating” service

Citizen tailored local service discovery

Open data publishing tools & support

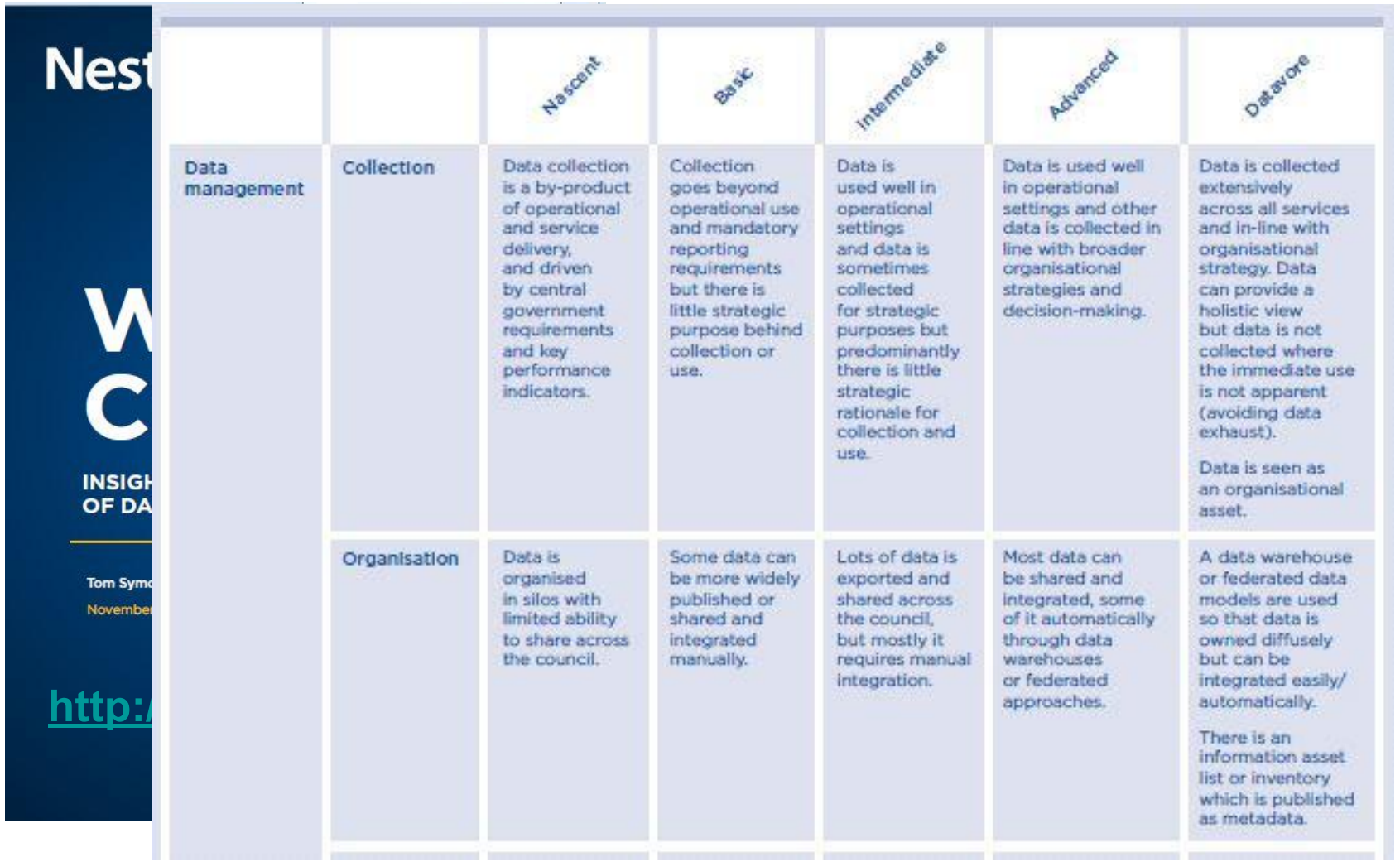
Data maturity awareness of best practice

A framework for data maturity

	Nascent	Basic	Intermediate	Advanced	Expert
Data Management	• How is data collected, organised and accessed? • How complete, accurate and current is data?				
Data Governance and Openness	• How easy is it to share data? • Is data sharing encouraged through clear protocols and leadership? • How does the organisation handle open data?				
Data Use	• How is data used in the decision-making process? • How is it used to evaluate and track performance? • How is data used to optimise and automate processes?				
Data Skills and Capability	• What is the level of data literacy across the organisation? • In which areas of the organisation are skills and capability concentrated?				
Organisational Culture Towards Data	• How much do people in the organisation understand and value data-informed decision making?				

Model in analogue form

Model in analogue form



		Nascent	Basic	Intermediate	Advanced	Datavore
Data management	Collection	Data collection is a by-product of operational and service delivery, and driven by central government requirements and key performance indicators.	Collection goes beyond operational use and mandatory reporting requirements but there is little strategic purpose behind collection or use.	Data is used well in operational settings and data is sometimes collected for strategic purposes but predominantly there is little strategic rationale for collection and use.	Data is used well in operational settings and other data is collected in line with broader organisational strategies and decision-making.	Data is collected extensively across all services and in-line with organisational strategy. Data can provide a holistic view but data is not collected where the immediate use is not apparent (avoiding data exhaust). Data is seen as an organisational asset.
	Organisation	Data is organised in silos with limited ability to share across the council.	Some data can be more widely published or shared and integrated manually.	Lots of data is exported and shared across the council, but mostly it requires manual integration.	Most data can be shared and integrated, some of it automatically through data warehouses or federated approaches.	A data warehouse or federated data models are used so that data is owned diffusely but can be integrated easily/ automatically. There is an information asset list or inventory which is published as metadata.

Model in analogue form

		Nascent	Basic	Intermediate	Advanced	Datavore
Data Use	Decision-making	Rich in data, poor in intelligence. Data is not a key part of decision-making processes.	Data is used in reports but usually in a cursory way and with little reference to decisions which have to be made.	Data analysis is usually requested for decision making, but can be inadequate because analysis is not of high quality, targeted at the decision to be made or the right data is not available.	Some decisions are informed by data on both the frontline and at senior levels, but it is not consistent across the organisation.	Rich in data intelligence and insight. Data is analysed on specifically for the purposes of key decisions which have to be made, consistently across the organisation. Data is available in a timely fashion to support decision-making.
	Performance and Evaluation	Services and performance are not evaluated using the data available.	Data is used to look retrospectively at performance, often in static format such as a spreadsheet. Data offers little insight into why events or performance variations occur.	Data is sometimes used to understand why events, or levels of performance, have occurred. Performance management using data is of limited value.	Data is sometimes sought to conduct evaluations of services and interventions, but mainly on an ad hoc basis. Data can be used to usefully performance manage staff and services, and there	Data is used to support service delivery in real-time, is used to understand in granular detail issues of performance, and can be used to understand the effectiveness of services and individual interventions.

Model in analogue form

		Nascent	Basic	Intermediate	Advanced	Datavore
Data Skills Capability		Skills and capacity are limited to IT system managers and basic software use. Most staff lack basic data literacy and skills.	Some staff are able to use basic software for simple analysis. Data literacy is patchy.	Data integration and analysis can be performed by some staff, but is not highly sophisticated. Most staff have a basic level of data literacy.	Sophisticated analysis can be undertaken, but not consistently across the organisation. Some staff have good data literacy but it is not uniform.	Data analysts are highly skilled and can work with multiple software packages. Sophisticated data science can be undertaken routinely across the organisation. All staff have a level of data literacy appropriate to their role. The organisation has timely access to all its data from line of business systems whether held internally or in Cloud facilities.
Data Awareness and Culture		There is limited awareness of how data can be used to improve services and outcomes.	Data is seen as having some value in niche uses, but most staff do not routinely try to use data to help them with their work.	Data integration and analysis can be performed by some staff, but is not highly sophisticated. Most staff have a basic level of data literacy.	There are some highly data-literate staff and the culture of the organisation expects data to be used in decision-making and service delivery.	All staff see data as a tool which can support them to do their jobs better.

Market testing/specification workshops

Organisational Assessment vs Project Readiness

Simple / easy-to-use tool preferred less rigour

Accessible and relevant to non data or IT-experts

Difficulty of assessing on an organisation-wide level

Using the tool to change organisational culture and raise awareness of benefits

Challenges of peer comparisons

Different perceptions of what each level of maturity feels like

The development guidelines

What it does:
Assesses overall DM, points out differences in perception, and highlights best practice examples to help improve areas of weakness.

ORGANISATIONAL ASSESSMENT

Key Features

- Series of questions based on Nesta's DM Framework.
- Multiple Assessors
- Visual and text report
- Peer comparison possible
- Next step recommendations / case studies

Pros

- Prompts cross-organisational discussion
- Input engagement from non data / IT experts
- Multiple use scenarios

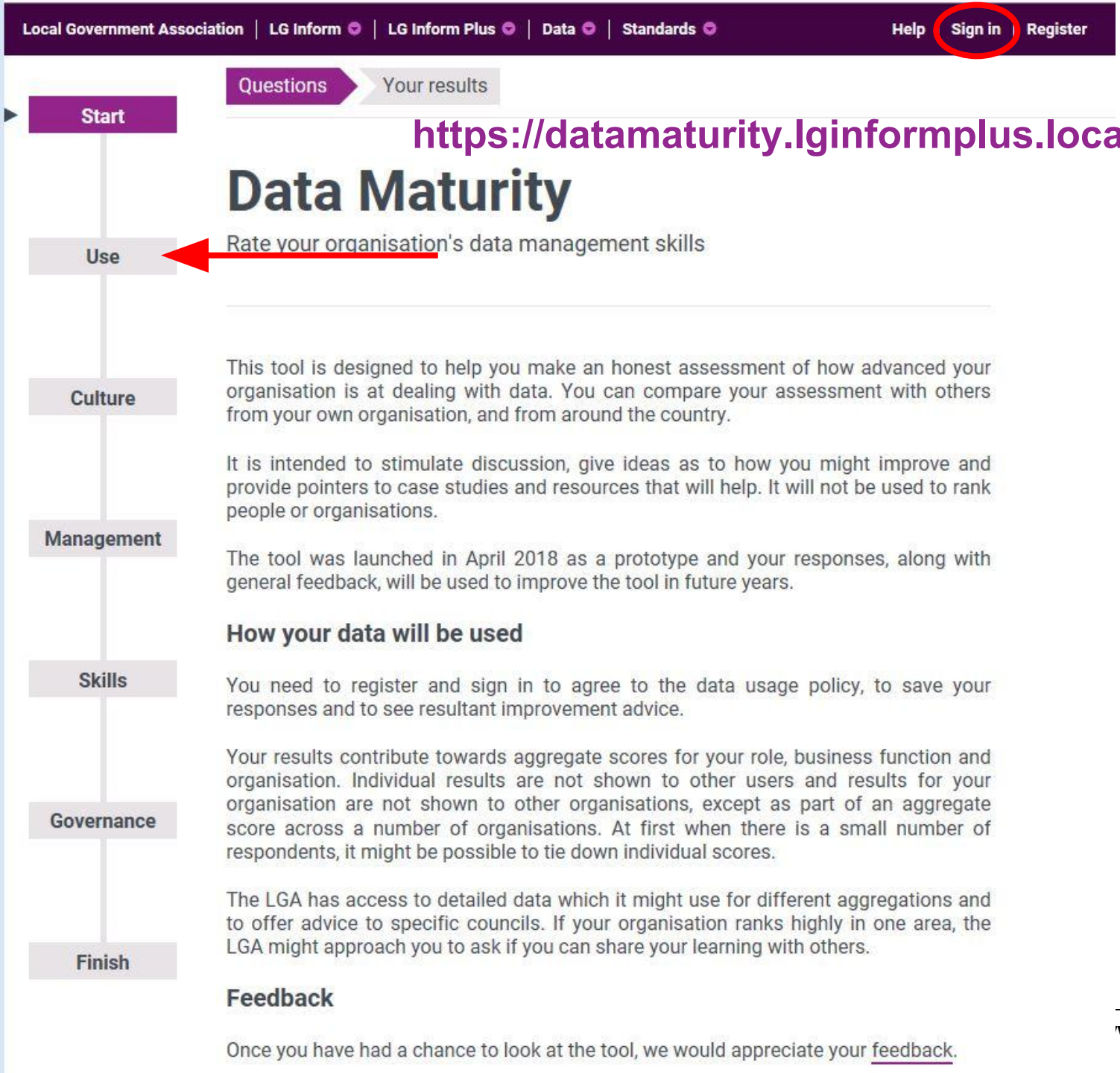
Cons

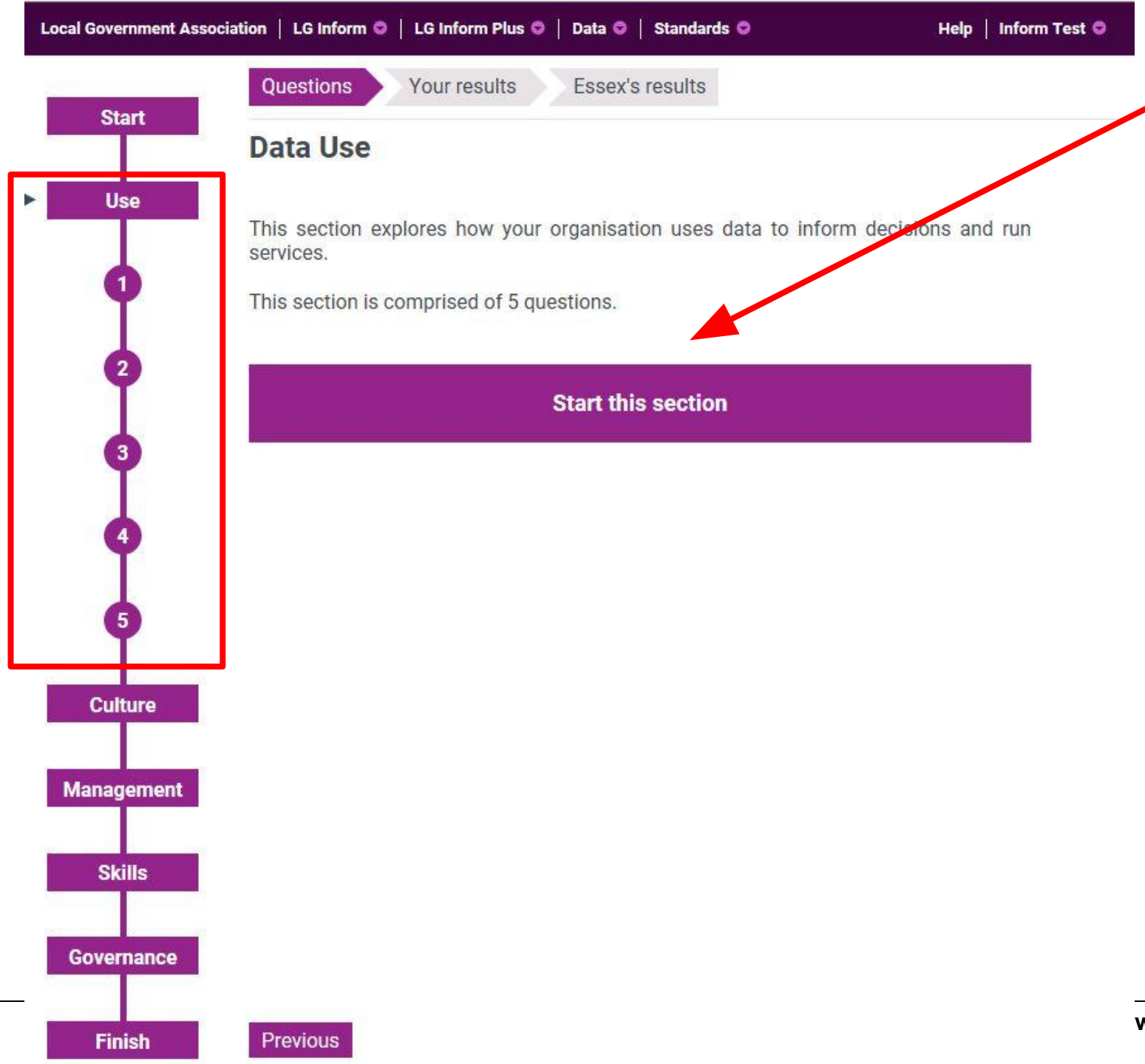
- Selecting the 'right' people to participate
- Takes longer to complete and obtain results
- Concerns about sharing individual results with other in the organisation and externally
- Difficulty ensuring assessments are consistently across authorities

nest

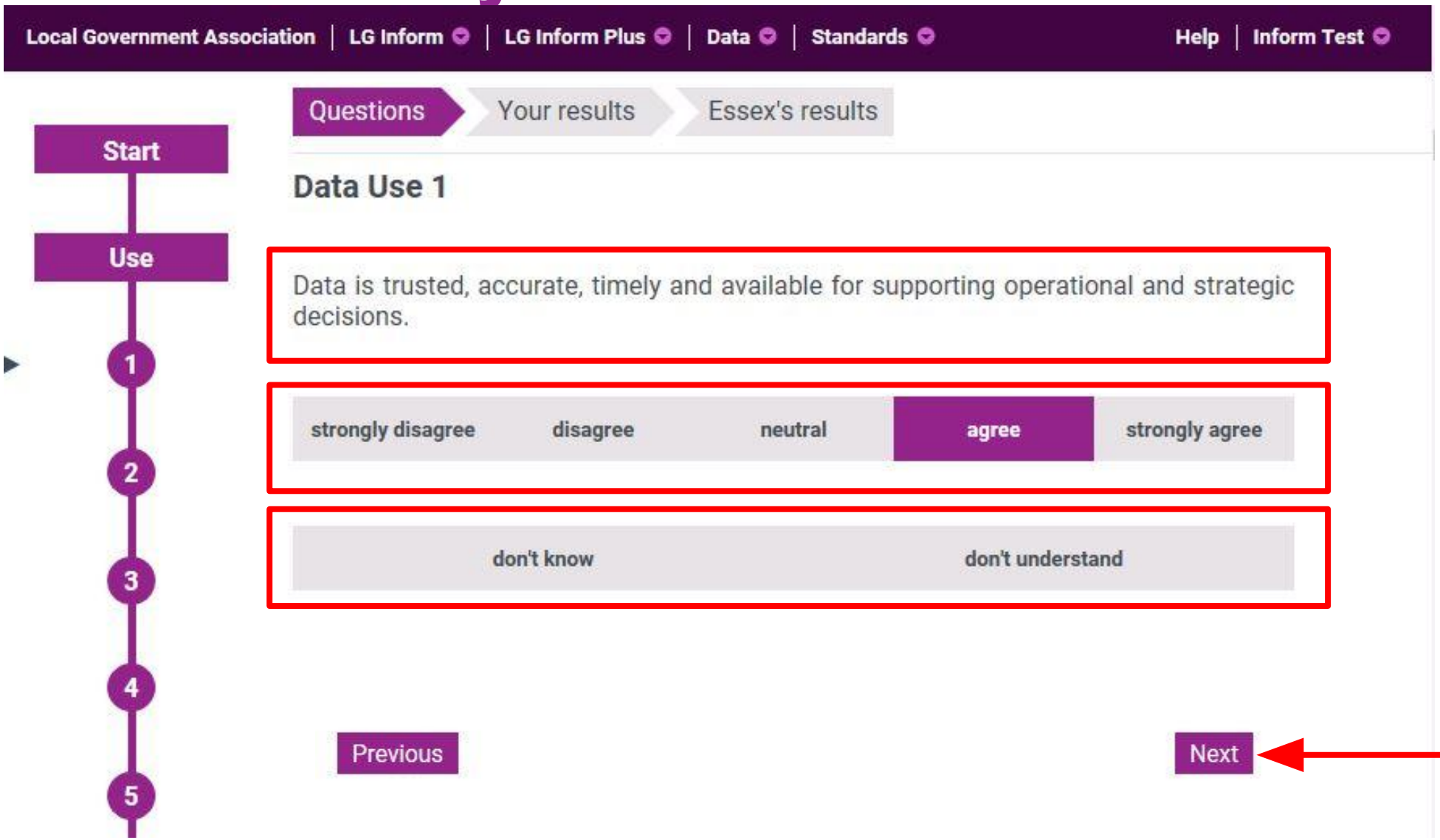
Information management tools

www.local.gov.uk/lginformplus

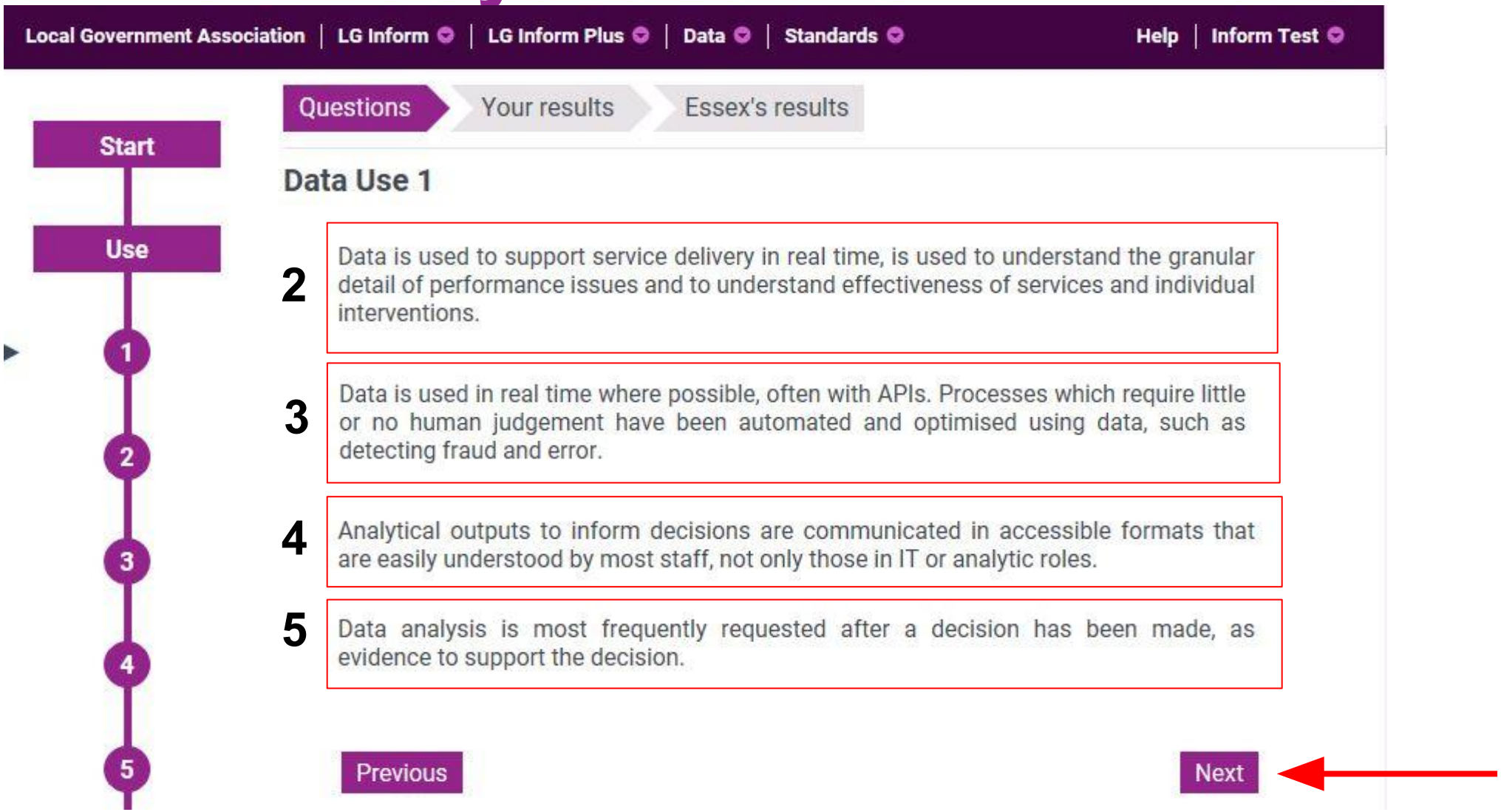

Local Government Association | LG Inform | LG Inform Plus | Data | Standards
Help
Sign in
Register
Questions
Your results
Start
Use
Culture
Management
Skills
Governance
Finish
https://datamaturity.lginformplus.local.gov.uk
Data Maturity
Rate your organisation's data management skills
This tool is designed to help you make an honest assessment of how advanced your organisation is at dealing with data. You can compare your assessment with others from your own organisation, and from around the country.
It is intended to stimulate discussion, give ideas as to how you might improve and provide pointers to case studies and resources that will help. It will not be used to rank people or organisations.
The tool was launched in April 2018 as a prototype and your responses, along with general feedback, will be used to improve the tool in future years.
How your data will be used
You need to register and sign in to agree to the data usage policy, to save your responses and to see resultant improvement advice.
Your results contribute towards aggregate scores for your role, business function and organisation. Individual results are not shown to other users and results for your organisation are not shown to other organisations, except as part of an aggregate score across a number of organisations. At first when there is a small number of respondents, it might be possible to tie down individual scores.
The LGA has access to detailed data which it might use for different aggregations and to offer advice to specific councils. If your organisation ranks highly in one area, the LGA might approach you to ask if you can share your learning with others.
Feedback
Once you have had a chance to look at the tool, we would appreciate your feedback.

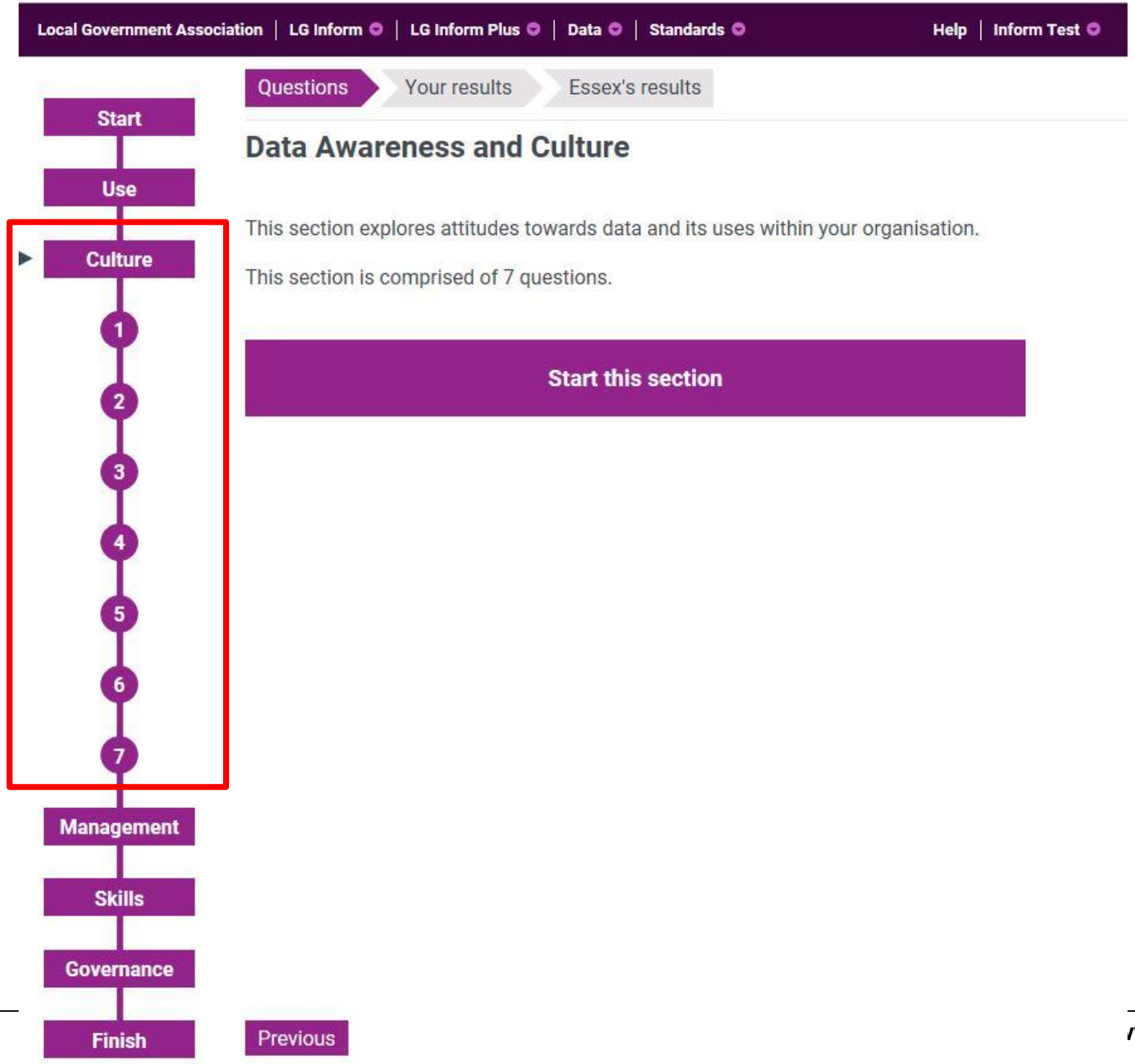

Local Government Association | LG Inform | LG Inform Plus | Data | Standards | Help | Inform Test
Questions
Your results
Essex's results
Start
Use
1
2
3
4
5
Culture
Management
Skills
Governance
Finish
Data Use
This section explores how your organisation uses data to inform decisions and run services.
This section is comprised of 5 questions.
Start this section
Previous

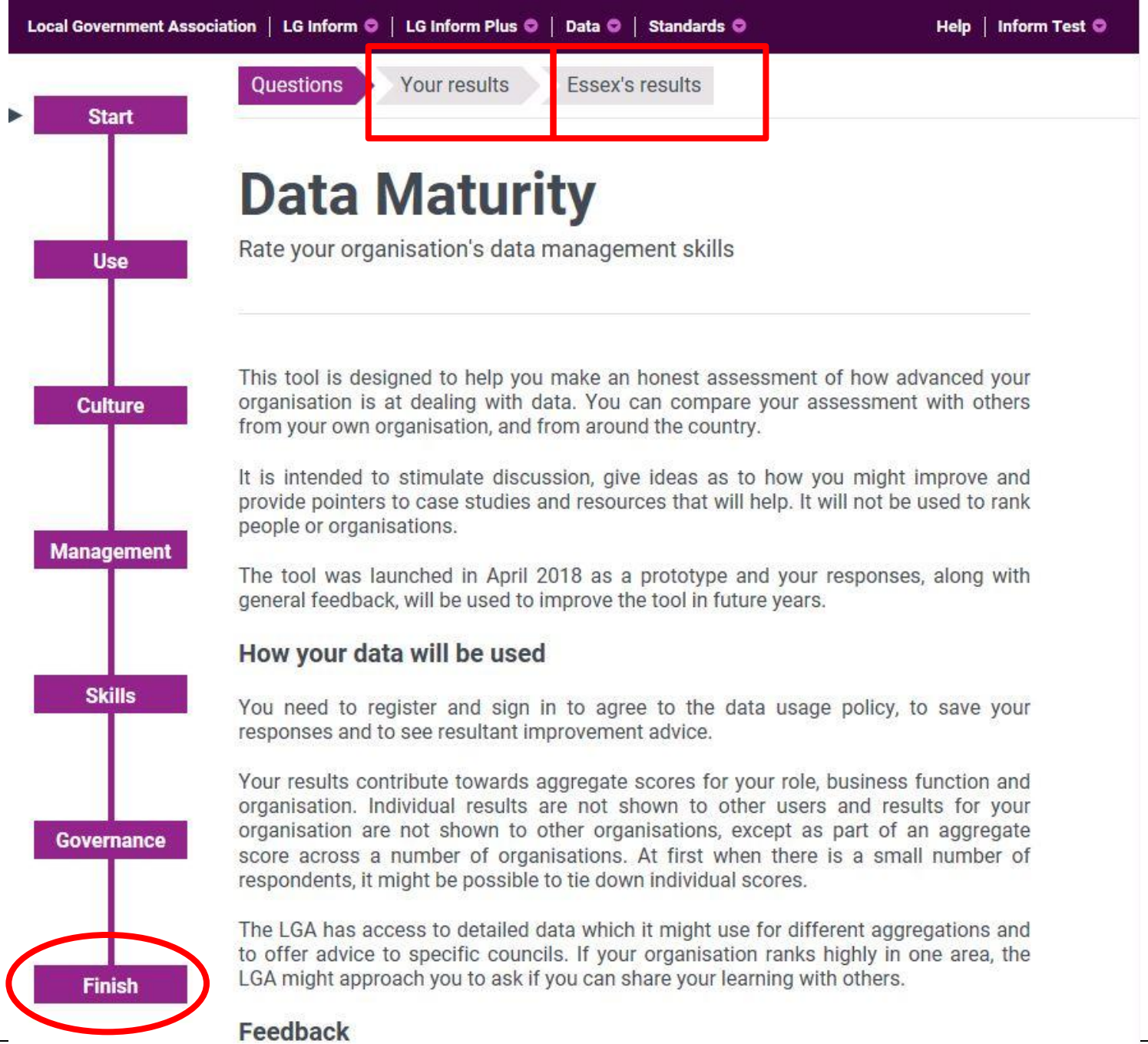
Data maturity self assessment tool



Data maturity self assessment tool




Local Government Association | LG Inform | LG Inform Plus | Data | Standards | Help | Inform Test
Questions
Your results
Essex's results
Start
Use
Culture
1
2
3
4
5
6
7
Management
Skills
Governance
Finish
Data Awareness and Culture
This section explores attitudes towards data and its uses within your organisation.
This section is comprised of 7 questions.
Start this section
Previous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Questions
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Use
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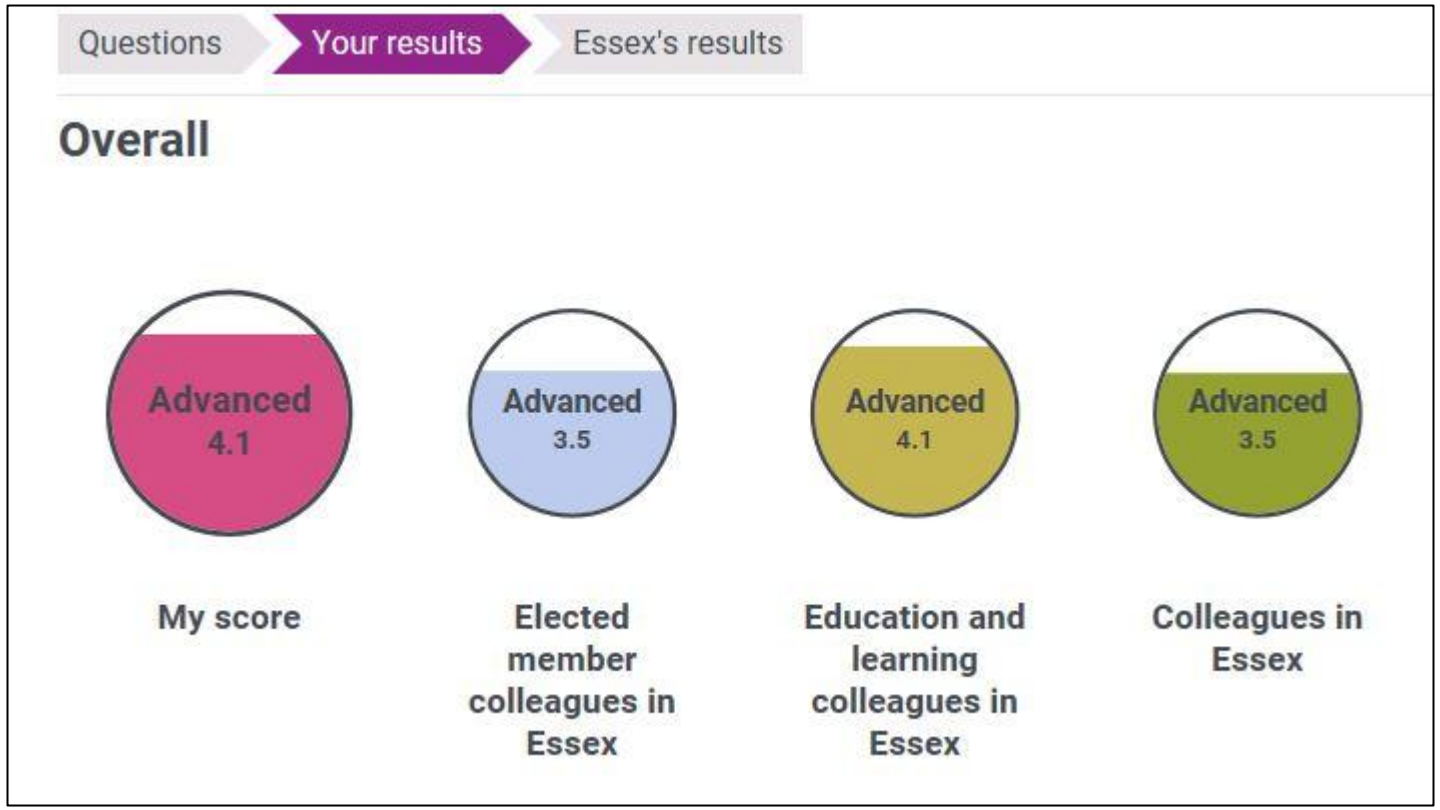
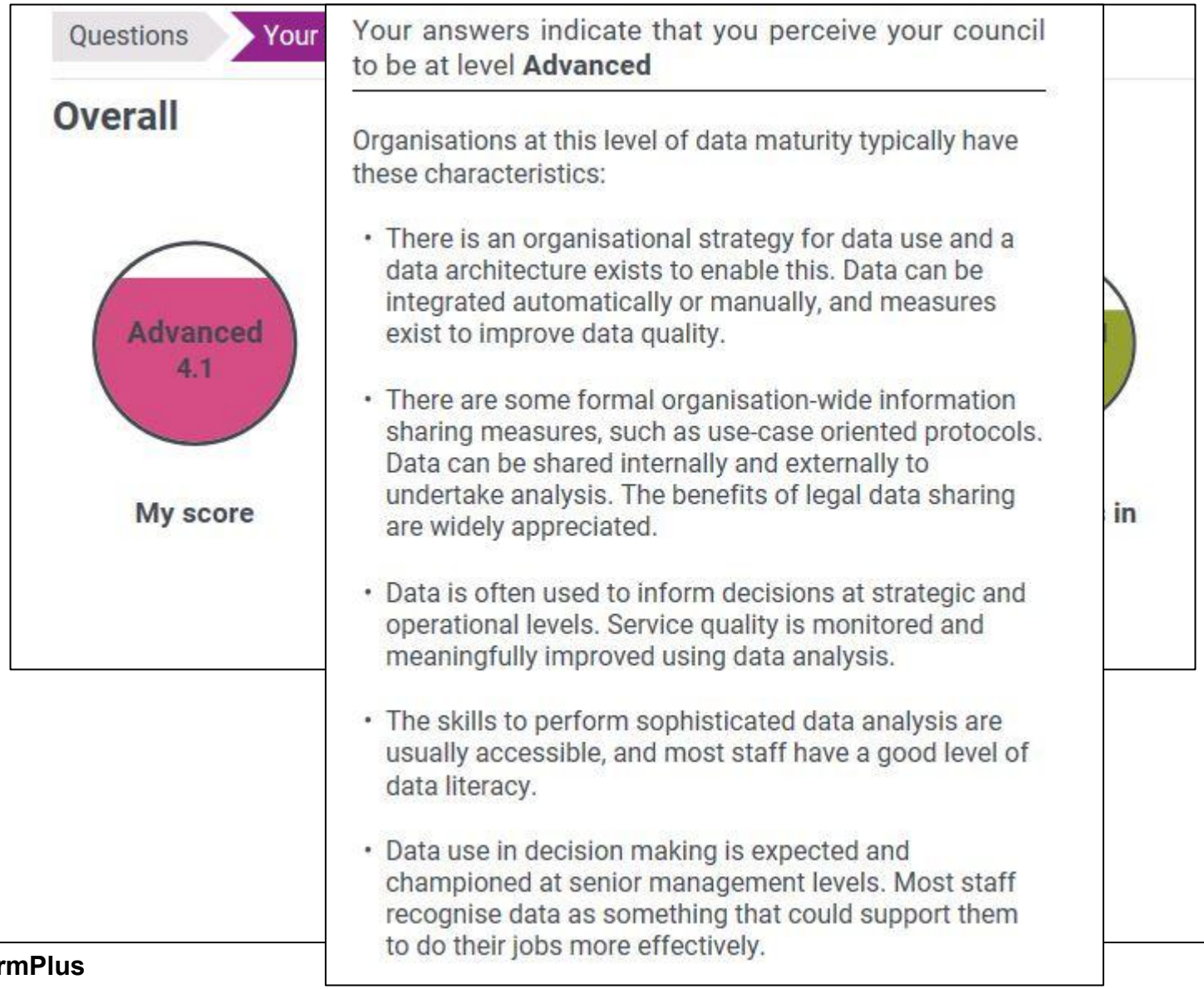
Presentation of results – overall local

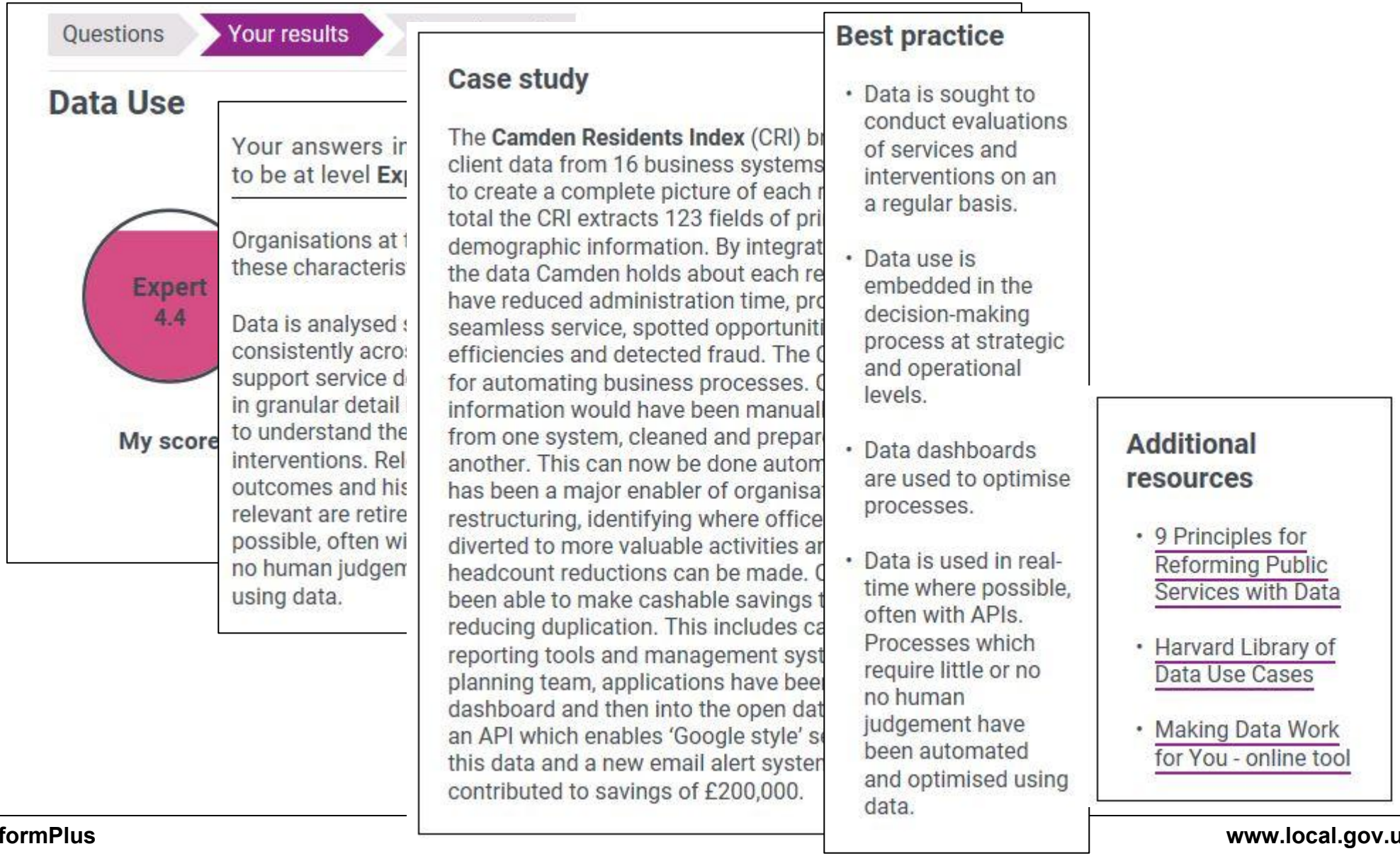


Presentation of results – overall local

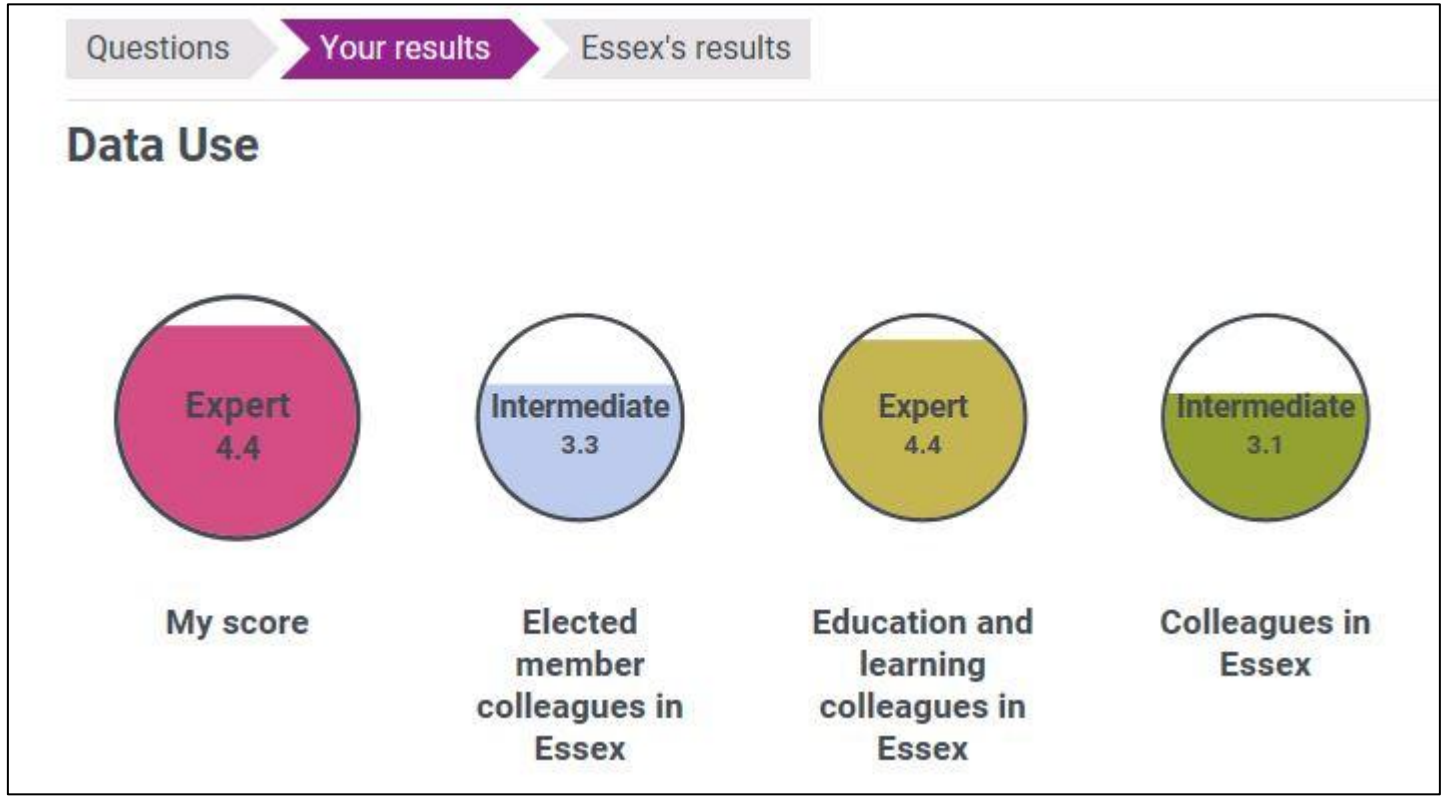


Presentation of results – overall local

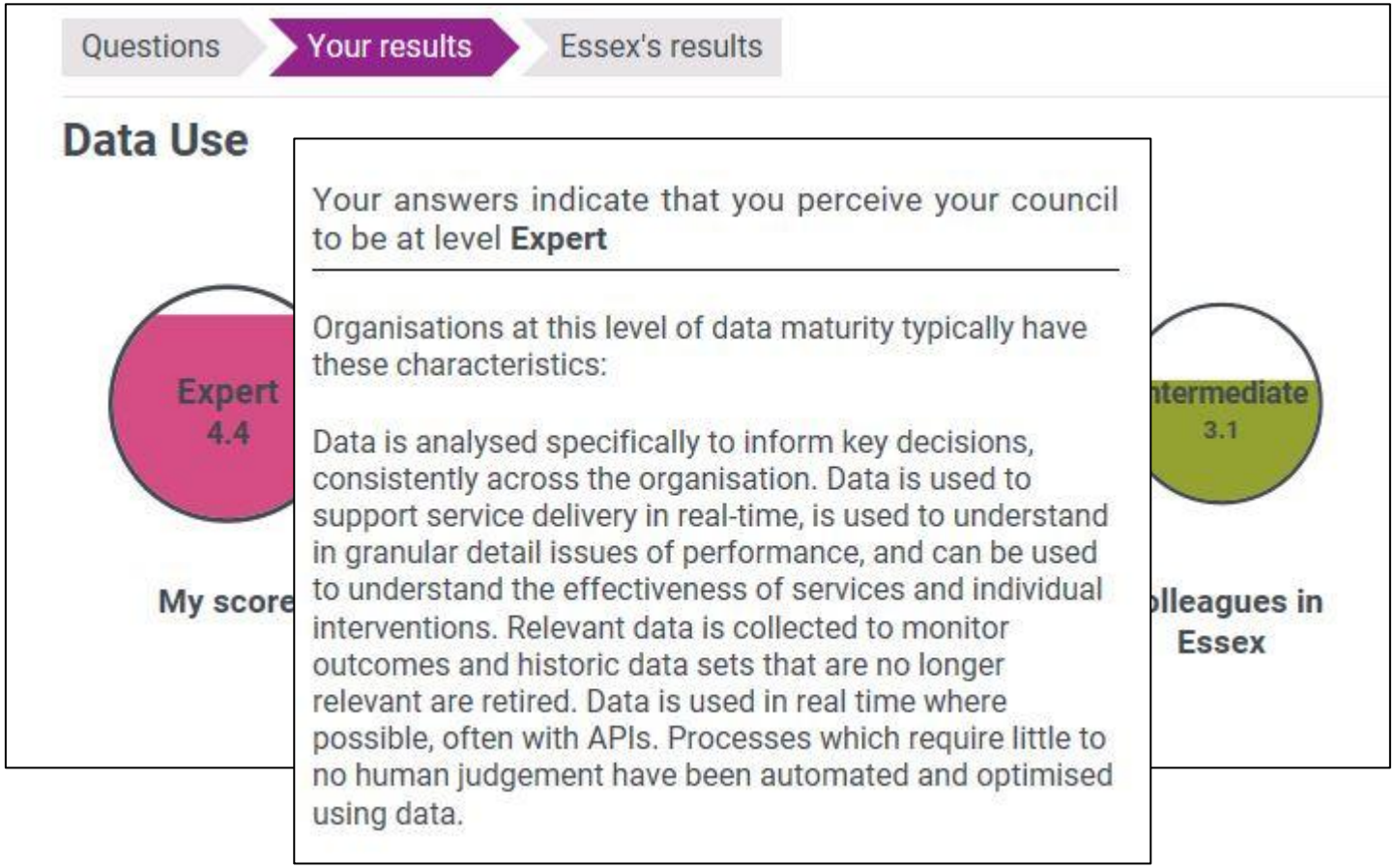
Presentation of results – data use



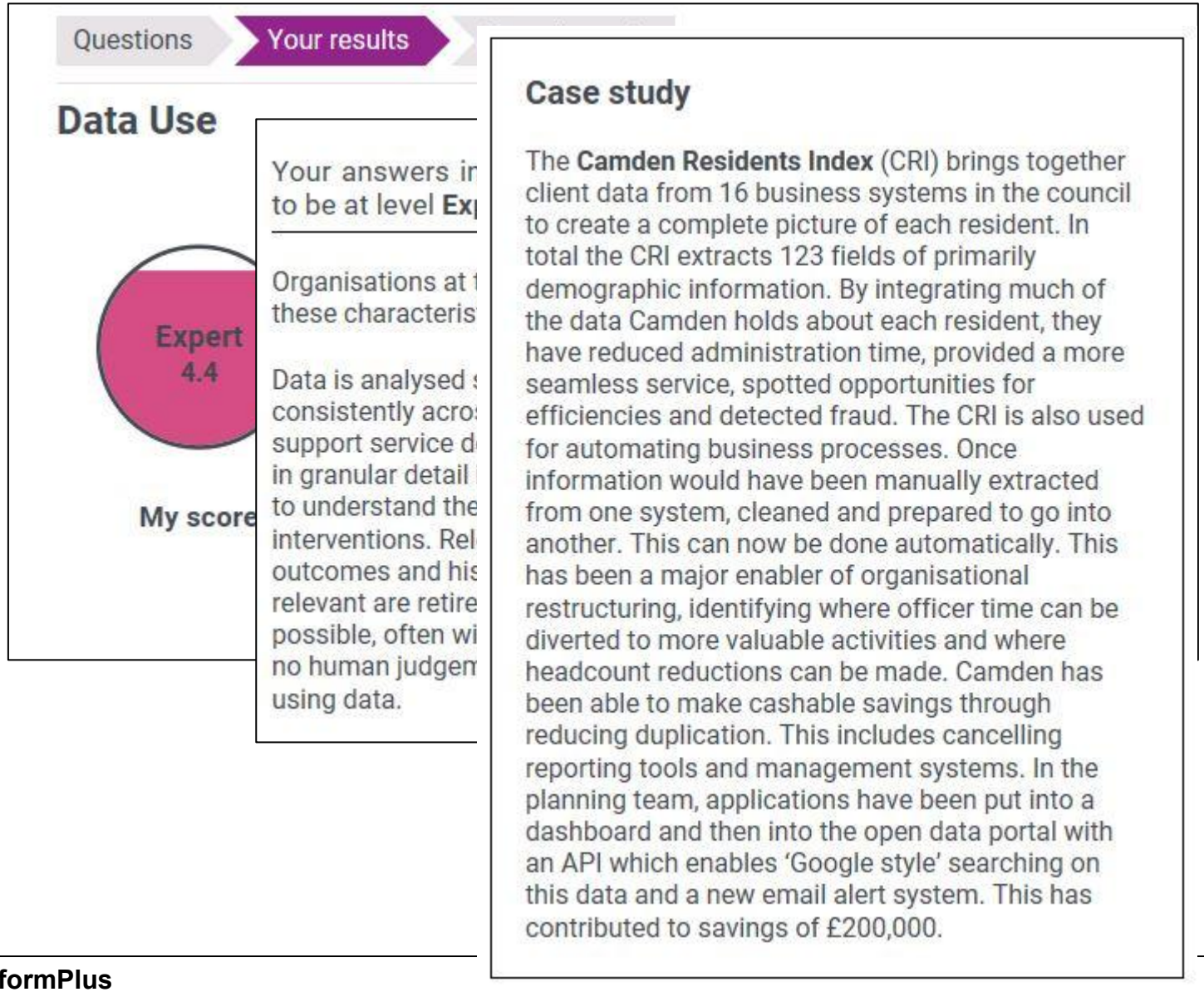
Presentation of results – data use



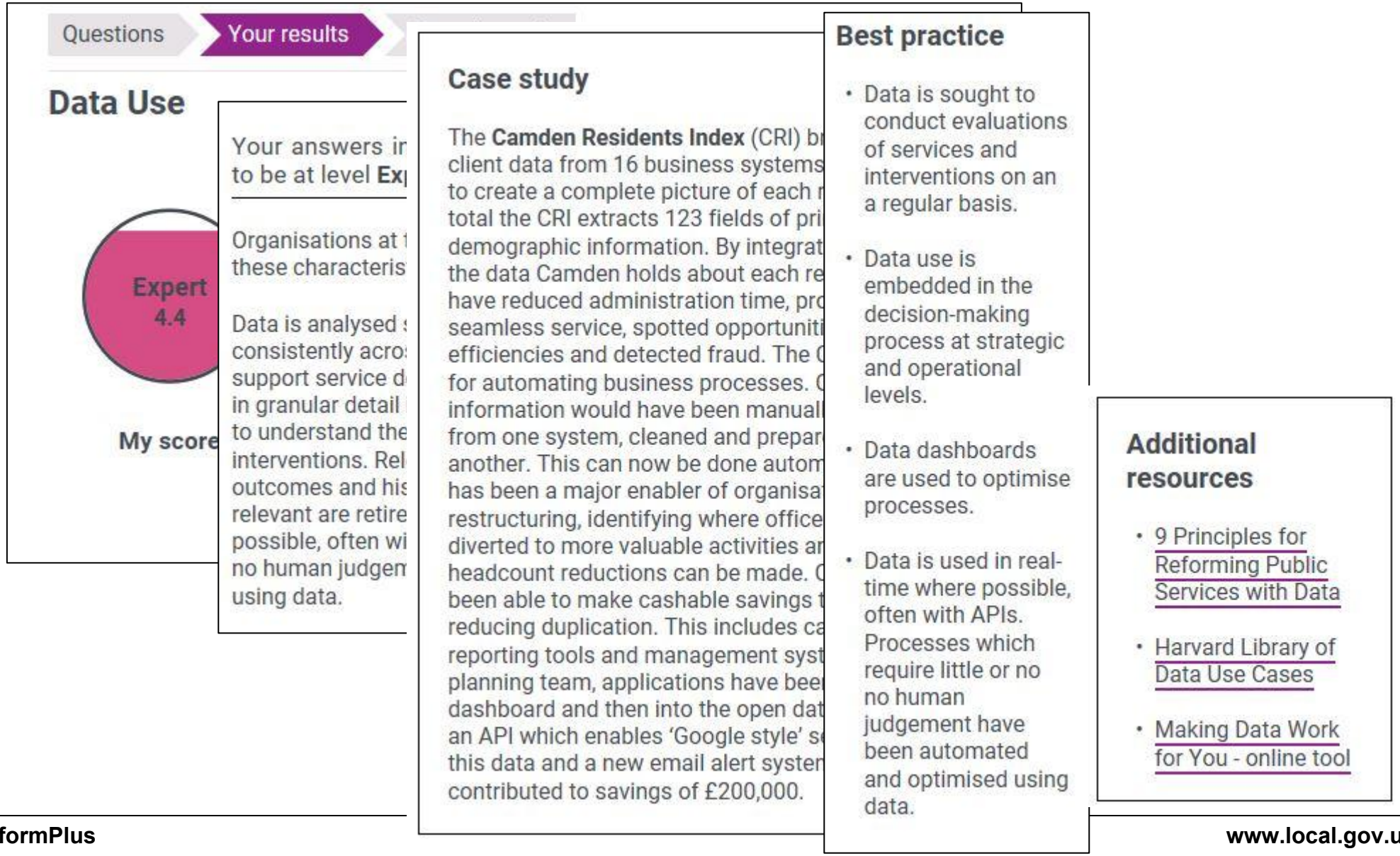
Presentation of results – data use



Presentation of results – data use

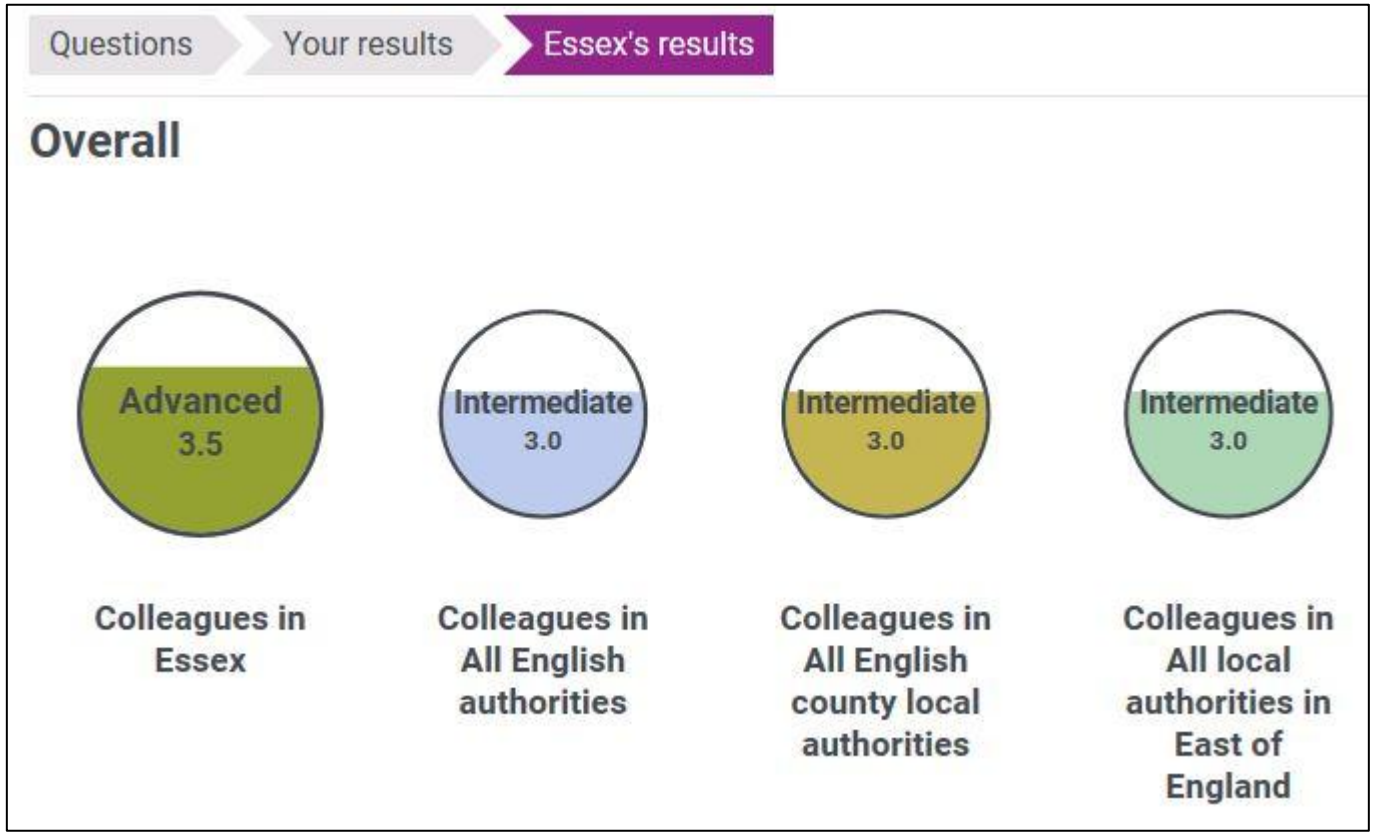


Presentation of results – data use

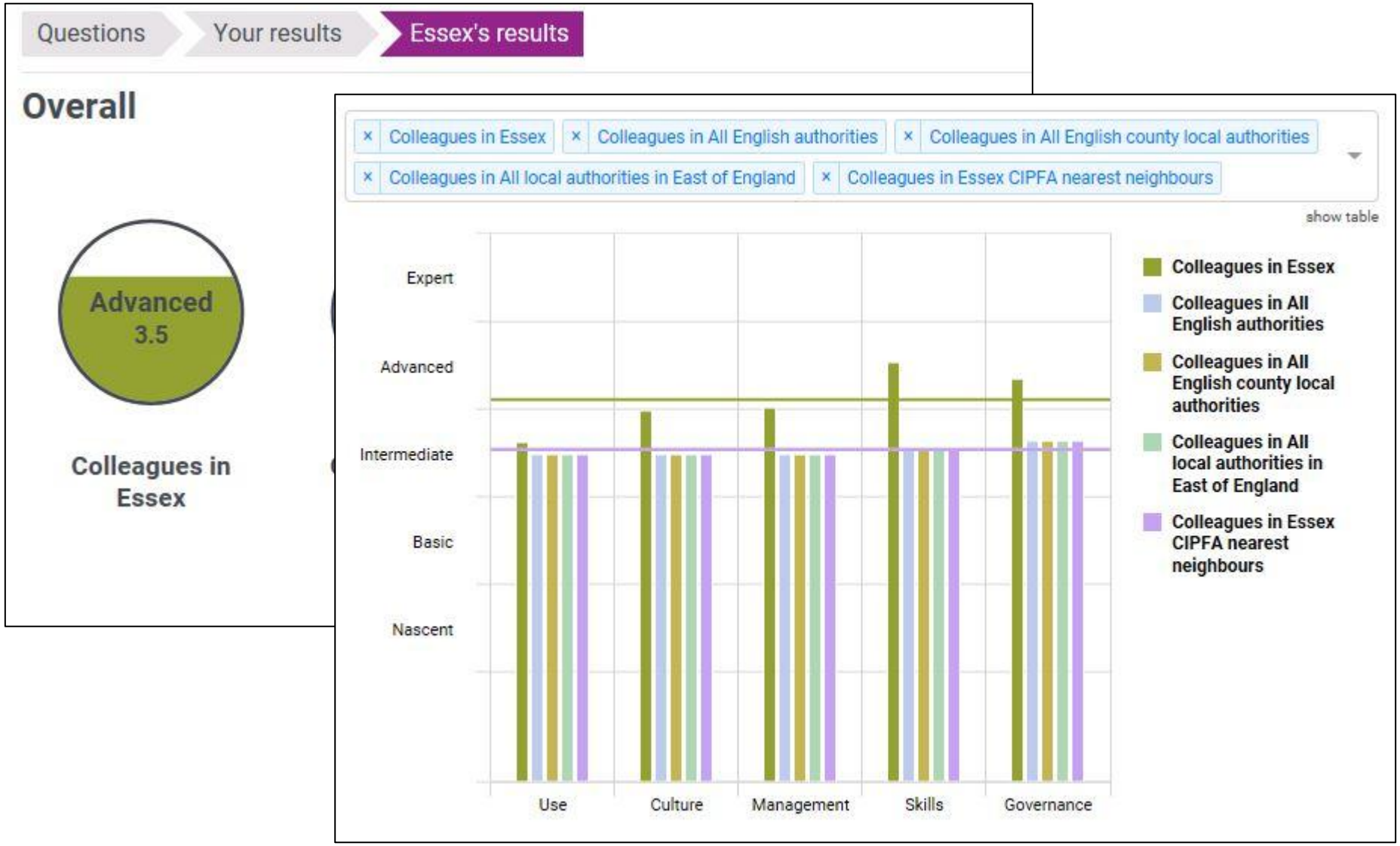


Presentation of results – categories

Presentation of results – comparison



Presentation of results – comparison



Conclusion & long term vision

Pros

- Good early interest but untried
- Assessment with consistency & rigour
- Easy to use for our initial learning
- Compares internal opinion across depts. & roles
- Encourages conversation
- Suggested next steps on improvement journey

Cons

- No control of respondents' skills, awareness
- Assessment of: projects, departments, organisations, partnerships ?
- Initial protected scores but lets see the trends

Further information

LG Inform Plus: local.gov.uk/lginformplus

Data maturity: datamaturity.lginformplus.local.gov.uk

Open data: opendata.lginformplus.local.gov.uk

Standards: standards.lginformplus.local.gov.uk/

Technical Help: support@esd.org.uk

tim.adams@local.gov.uk
@DrTimAdams
transparency@local.gov.uk

NestaGuest | seespark

@nesta_uk | #CityData

Embrace the new or fix the plumbing?

Eddie Copeland, Director, Government Innovation, Nesta

Kathy Settle, Cabinet Office

Hilary Simpson, Founder, Sleuth - The Consultancy Cooperative

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Lunch and networking

Conversation points:

1. Your data initiatives
2. New technologies
3. Working with the tech sector
4. Data Maturity Interactive Tool
5. Using algorithms

Future trends

Tom Symons

Principal Researcher, Nesta

@TomWSymons

"The future is already here, and it's happening in local government" **not William Gibson

nesta


"With great power, comes great responsibility, especially when you work in local government"

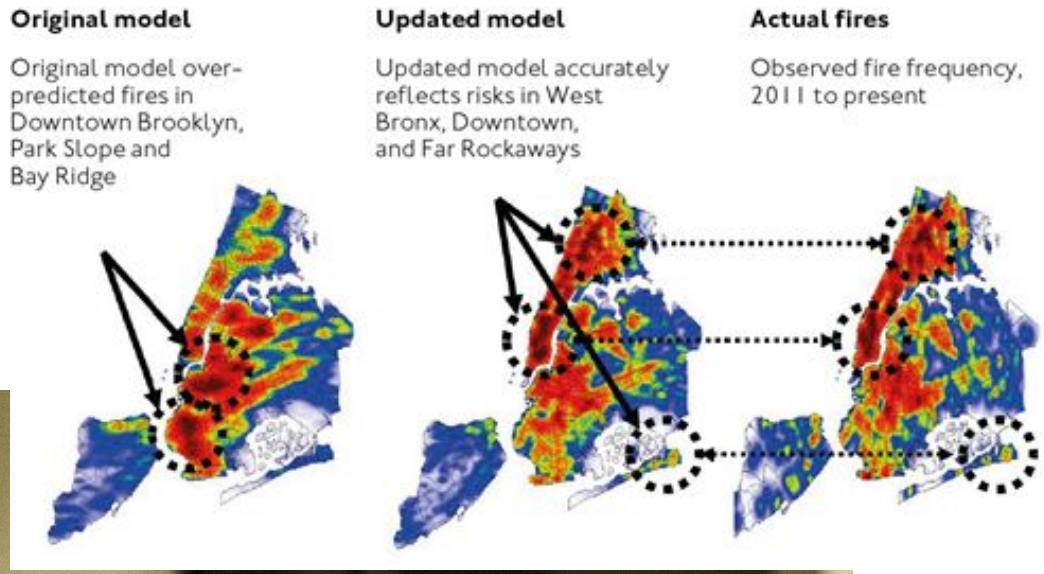
Three data and technology trends shaping local government

1. Predictive data analytics to inform decision making

2. The emergence of Artificial Intelligence

3. Smart Cities and ubiquitous data capture in public spaces

Predictive Analytics to inform decision making



Chicago uses new technology to solve this very old urban problem

by Mehboob Jeelani @jeelanireports APRIL 29, 2015, 9:11 AM EDT

Data protection

Police data could be labelling 'suspects' for crimes they have not committed

Jathan Sadowski

@jathansadowski
Thu 4 Feb 2016 12.30 GMT

1,018 54

Several US law enforcement agencies use analytics software to identify potential criminals, yet there is little oversight and no proof the data is reliable

▲ Analytics systems can be used to predict terrorist attacks and flag suspected criminals. But researchers argue they can also entrench prejudices and aggressively target disempowered groups. Photograph: John J Kim/Zuma Press/Corbis

A police officer stands at the corner of a busy intersection, scanning the crowd with her body camera. The feed is live-streamed into the Real Time Crime Center at department headquarters, where specialized software uses biometric recognition to determine if there are any persons of interests on the street.

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The emergence of AI

Inequality

Rise of the racist robots – how AI is learning all our worst impulses

There is a saying in computer science: garbage in, garbage out. When we feed machines data that reflects our prejudices, they mimic them – from antisemitic chatbots to racially biased software. Does a horrifying future await people forced to live at the mercy of algorithms?

The Inequality Project is supported by

FORD FOUNDATION

About this content

Stephen Buranyi

Tue 8 Aug 2017 07.00 BST

6,191 308

▲ Current laws 'largely fail to address discrimination' when it comes to big data. Photograph: artpartner-images/Getty Images

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Smart cities and the ubiquitous collection of data in public spaces

World ▸ Europe US Americas Asia Australia Middle East Africa Inequality Cities Global development

Cities

'Living laboratories': the Dutch cities amassing data on oblivious residents

▲ Using a smartphone in Utrecht, where €80m has been invested in data-driven management. Photograph: Alamy

In Eindhoven and Utrecht smart tech is tackling traffic, noise and crime. But with privacy laws proving futile and commercial companies in on the act, are the plans as benign as they seem?

Stratumseind in Eindhoven is one of the busiest nightlife streets in the Netherlands. On a Saturday night, bars are packed, music blares through the street, laughter and drunken shouting bounces off the walls. As the night progresses, the ground becomes littered with empty shot bottles, energy drink cans, cigarette butts and broken glass.

QUARTZ

TRASHED

City of London halts recycling bins tracking phones of passers-by

SHARE

WRITTEN BY

Zachary M. Seward

Siraj Datoo

August 12, 2013

The City of London is halting a scheme that used recycling bins to track people as they walked by with their smartphones. The head of Renew London, which was behind the operation, wrote in an email, "I can

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“People need dramatic examples to shake them out of apathy”

NestaGuest | seespark

@nesta_uk | #CityData

Data in the city: can a smart city also be a private city?

Tom Symons, Principal Researcher, Nesta (facilitator)

Theo Bass, Researcher, Government Innovation, Nesta

Rachel Coldicutt, CEO, Doteveryone

Richard Pope, Chief Operating Officer, Projects by IF

Lauren Sager-Weinstein, Chief Data Officer,
Transport for London

nesta

Data in the city: can a smart city also be a private city?

Theo Bass

Research, Government Innovation, Nesta

@Theo_Bass

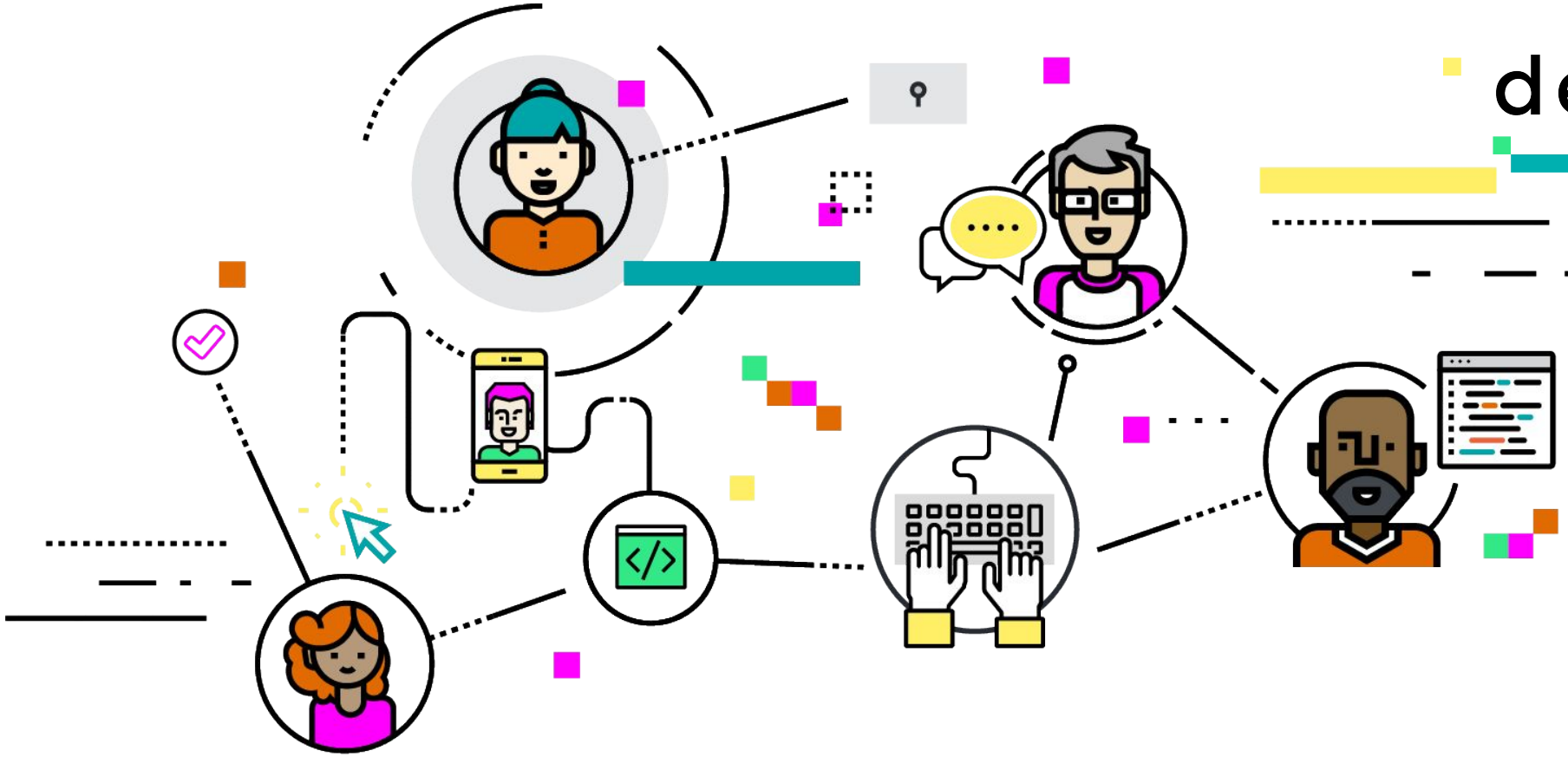
An introduction to DECODE

Nesta City Data Analytics Conference

Theo Bass, Government Innovation Team, Nesta

May 2018

decode



DECODE is a European Commission funded project piloting new technologies that give people more control over how they manage and use personal data generated online.

We are testing the technology in two pilot cities - Barcelona and Amsterdam - and will explore the social benefits of widespread open data commons.

Who is DECODE?

The personal data economy

decode

Current paradigm

- Data is a **fictitious commodity**, that can be sold and traded in markets
- Data handling & monetization is **opaque**
- Even if there is regulation, there is **no possible enforcement**

The New York Times

How Uber Uses Psychological Tricks to Push Its Drivers' Buttons

The company has undertaken an extraordinary experiment in behavioral science to subtly entice an independent work force to maximize its growth.

Emotional surveillance goes mainstream

In 2018, artificial intelligence that can read your emotions and predict mental health outcomes gets used and abused, says Lydia Nicholas

CBC | MENU

news Top Stories Local The National Opinion World

decode

Welcome to the neighbourhood. Have you read the terms of service?

Smart cities? Tell it like it is, they're surveillance cities

Lots of lovely data, less of lovely privacy

By Chris Mellor 7 Sep 2017 at 08:07 55 SHARE ▼

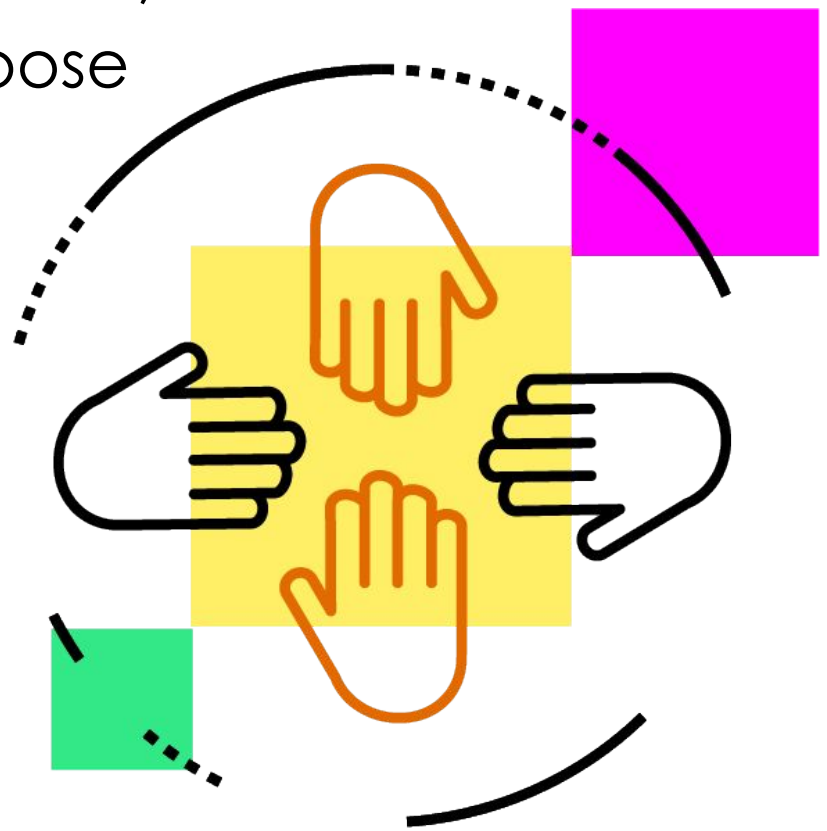
Challenge: Enabling the Digital Commons

decode

Can we **regain <u>control</u>** of our data?

We want to *flexibly* decide **who** to share it with, under which **rules**, **when** and for **what** purpose and we want to do it in a **transparently**.

In short: Real **<u>data sovereignty</u>**



Untraceable, unlikable identities: Attributed Based Credentials (ABCs)

decode

"Over 18"

"Resident of the city of London"

"Local government employee"

"Post code within Westminster"

"Accountant"

INDEPENDENT

INDY/TECH

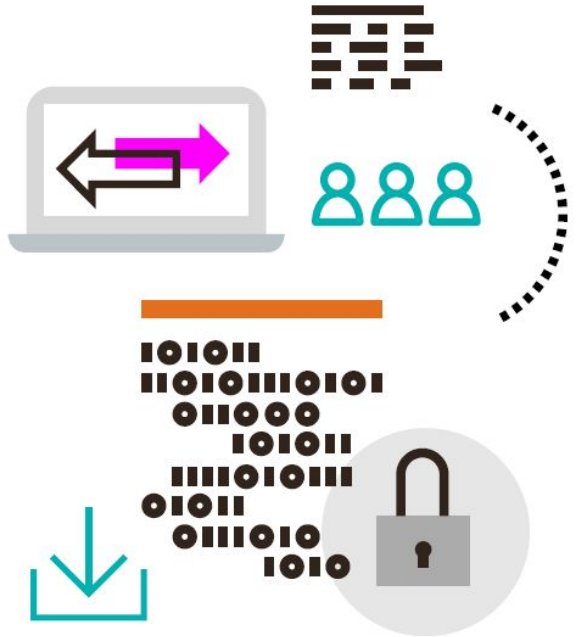
PORN SITE AGE VERIFICATION LAWS COULD FORCE USERS TO REGISTER CREDIT CARDS

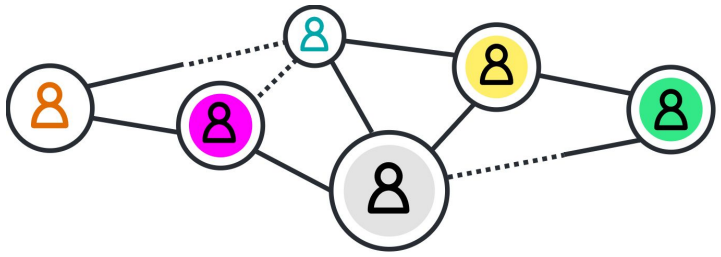
A trusted mechanism for sharing data: Attribute Based Encryption (ABE)

decode

- **Resource Attributes**
  Type;
  Creator;
  Name;
  …
- **The attributes of the subject**
  Name;
  Department;
  Position;
  …
- **Attributes actions**
  Name;
  …
- **Attributes environment**
  IP-address;
  Time;
  Device;
  …

cryptowiki.net

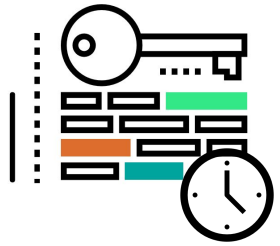




“Smart Rules”

decode

“Share for 15 minutes”



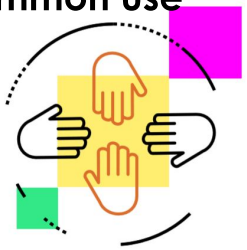
“Share with registered energy suppliers only”

“Share with local govt. only”

“Share with IP addresses in my city only”

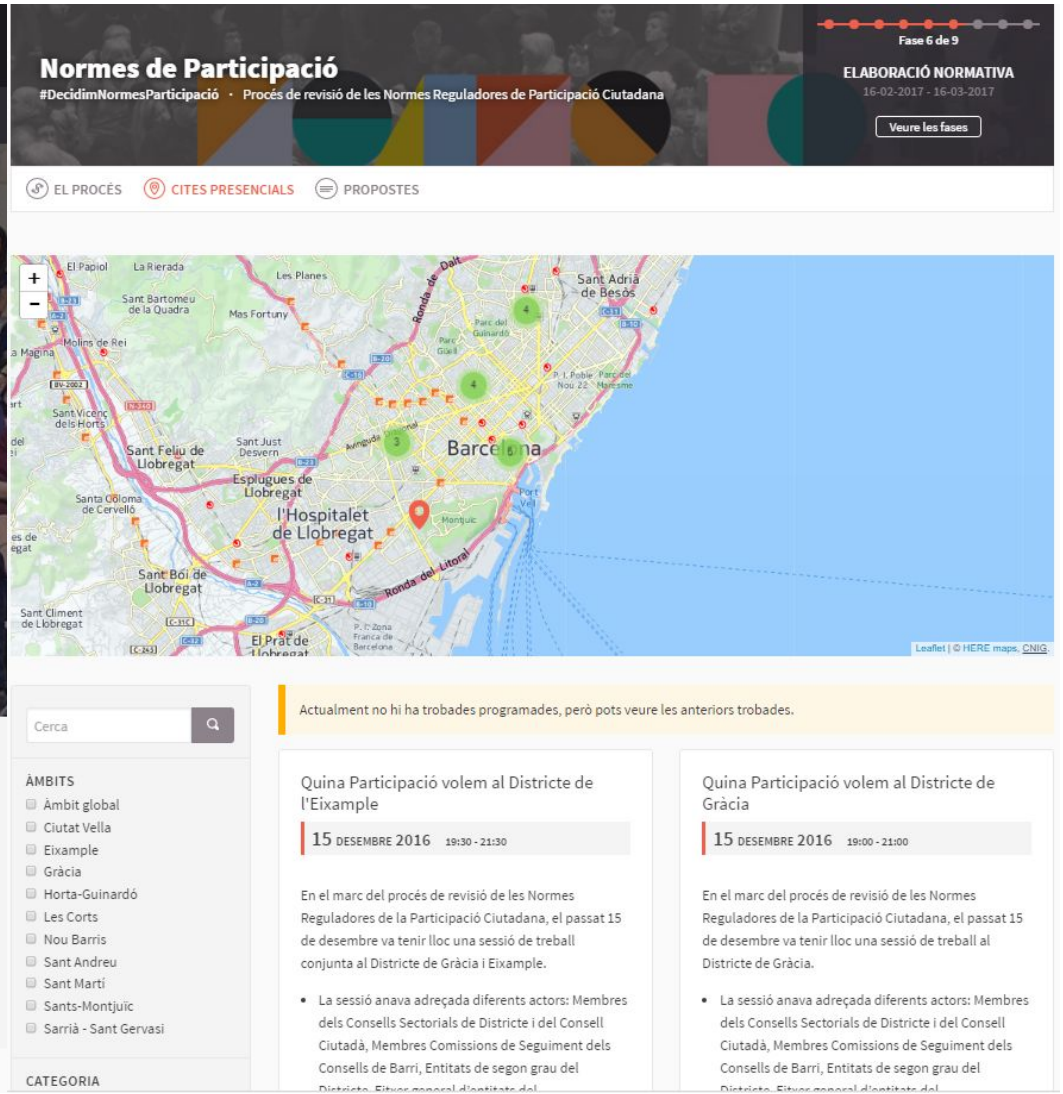
“Anonymous except for friends and family”

“Available for common use”



BCN Pilot: data-driven participatory democracy (DECIDIM)

decode



BCN Pilot: data-driven participatory democracy (DECIDIM)

decode

Decidim Barcelona

decidim.barcelona

- Open source, 30k users
- Accountability on signing petitions & online voting, yet privacy on political beliefs
- Provides tools for people with similar political beliefs to find one another

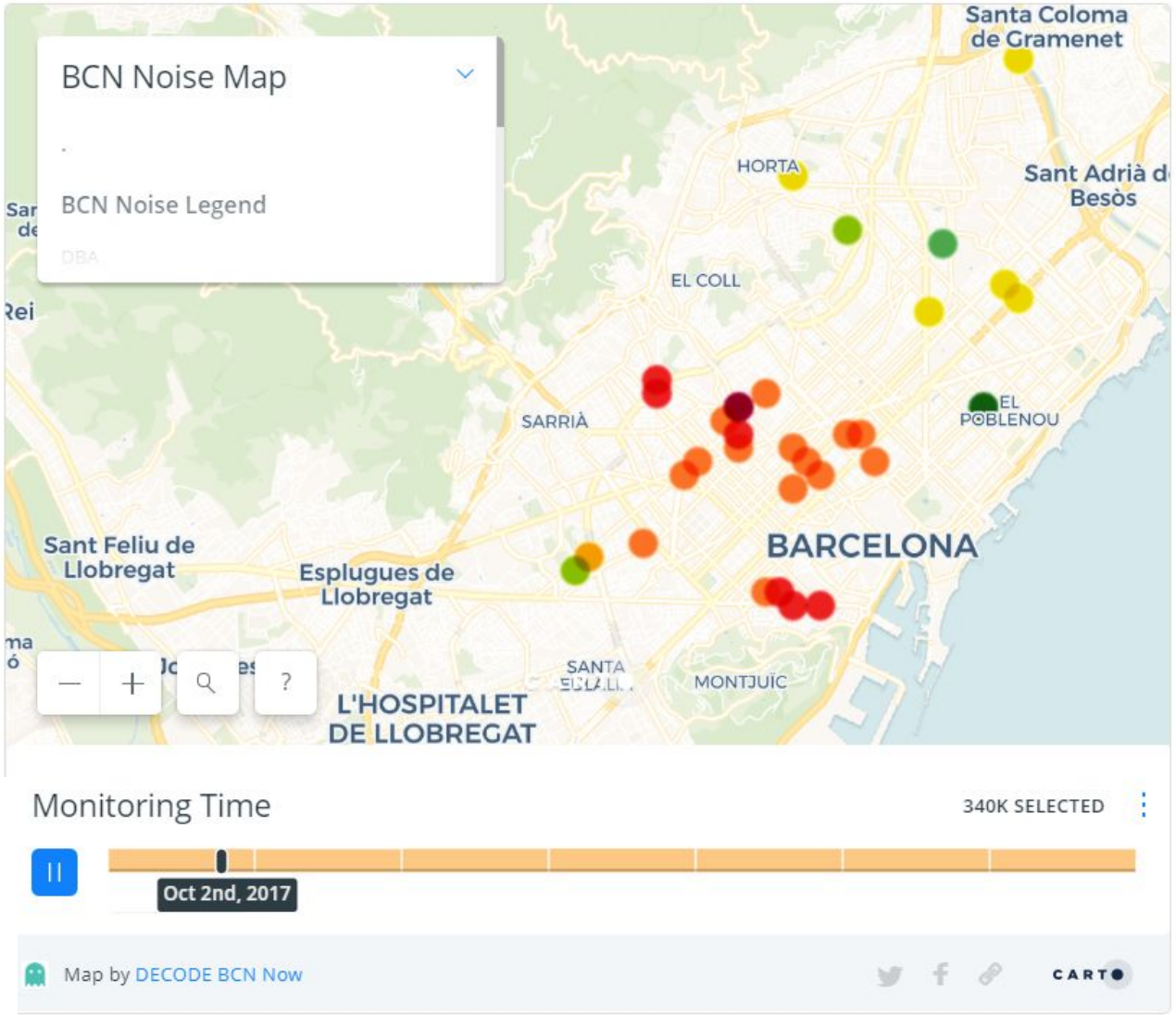
"Resident of the city of Barcelona"

IoT pilot: Personalised data commons dashboards

decode

smartcitizen.me/makingsense

- IoT data might be privacy-sensitive
- Crowd sensing of a problem with IoT in a community
- Users can decide to whom and under which conditions they share data



SMART CITIZEN

Making Sense

Advances and experiments in participatory sensing

Community pilots

decode

Smart cities need thick data, not big data

In Barcelona, high-tech data platforms generate demand for old-fashioned community development.

The Guardian UK edition

smartcitizen.me/makingsense

@theo_bass

info@decodeproject.eu

Thank you

decodeproject.eu

@decodeproject @decodeproject decodeproject

Data in the city: can a smart city also be a private city?

Rachel Coldicutt

CEO, Doteveryone

@RachelColdicutt

Rachel Coldicutt

CEO, Doteveryone

@rachelcoldicutt
@doteveryoneuk

People Create Place

doteveryone

Doteveryone champions responsible technology for the good of everyone in society.

Responsible Technology considers its **social impact** and seeks to understand and minimise its potential **unintended consequences**

PEOPLE POWER

BETTER BUSINESS

BOLD POLICY MAKING

- THE SINGULARITY
- SEMANTICS
- PEOPLE
- WHO CREATES DATA?

Semantics, or be careful what you wish for

A Smarter London as “the **global home** to data innovation and artificial intelligence”

But who is a city really home to?

PEOPLE FIRST, TECHNOLOGY SECOND

A Smarter London should “help those who live, work in and visit London live more **secure**, **informed** and **adaptable** lives”

The Singularity hasn’t happened yet

picture: Ars Technika


BINS NOT
ROBOTS

London as a home to people

Putting people first is quite challenging

- Messy
- Inconsistent
- Say one thing, do another
- Don’t read terms and conditions

People leave their phones at home and get locked out of their houses

“the model used by economists … replaces homo sapiens with a fictional creature called homo economicus”

Richard Thaler, “Misbehaving”

PEOPLE MAKE THE CITY

Cité

built environment

Ville

consciousness of the city

Richard Sennett, “Building and Dwelling”

Consent in a city is dynamic and reactive

- Inclusive and transparent data standards
- Meaningful consent
- New governance models

Who creates data?

In the Smart City, the state is mediated by the market

Do you need a smart phone in the smart city?


citymapper.com/smartbus
Try it for FREE
A new smart bus
by Citymapper
BT66 UAR


09:41
Tuesday 12 September


11:03 PM
Contact info
Jack
Online
Chat
Call
Send Message
Send Photo
Details
Groups

- Realistic, inclusive data-driven policy making
- Standards for secure public wifi

What if we stopped measuring so many things?

Thank you

doteveryone.org.uk @doteveryoneuk

Data in the city: can a smart city also be a private city?

Richard Pope

Chief Operating Officer, Projects by IF

@RichardJPope

Trust and the digital city

Richard Pope

The real opportunity of a digital city is better services that positively impact the lives of millions

It is a requirement of a healthy society that people are able to trust the services they rely on

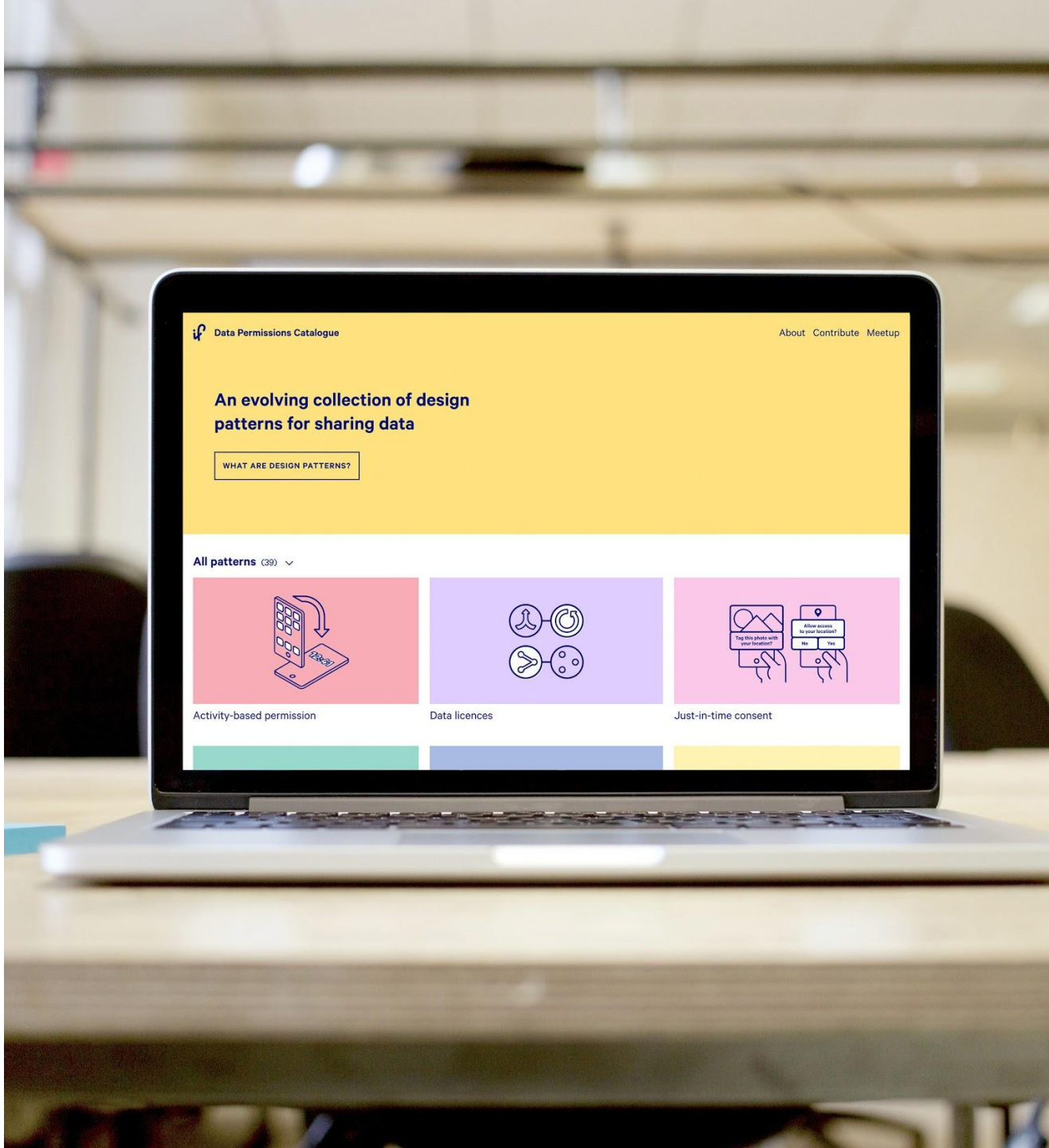
Any organisation seeking to make use of data needs to build and maintain the trust of the people represented by that data, and of society

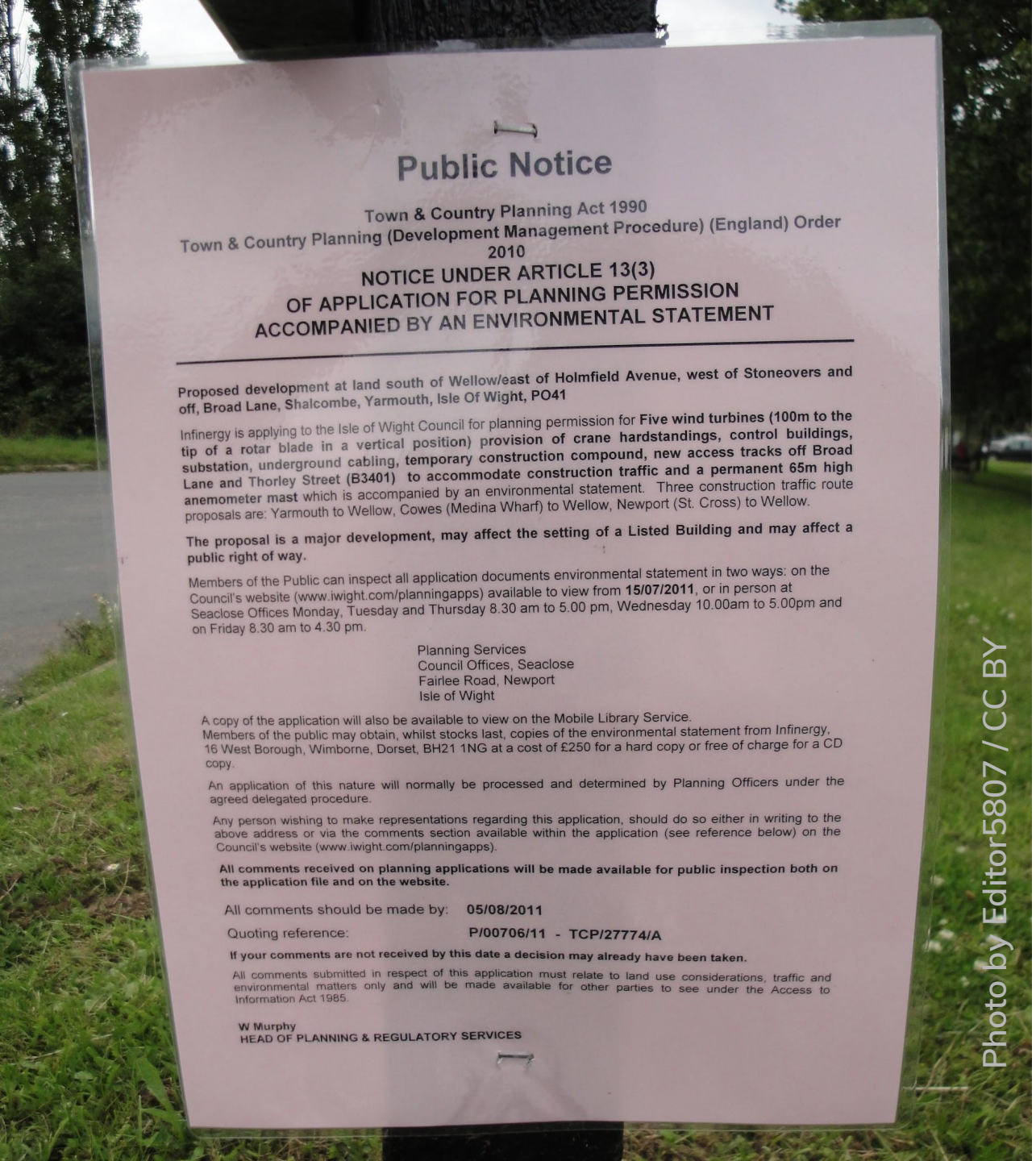
That will mean thinking beyond anonymity and ownership

How do we design privacy, legibility and accountability into public services, spaces and institutions?

Design for understanding

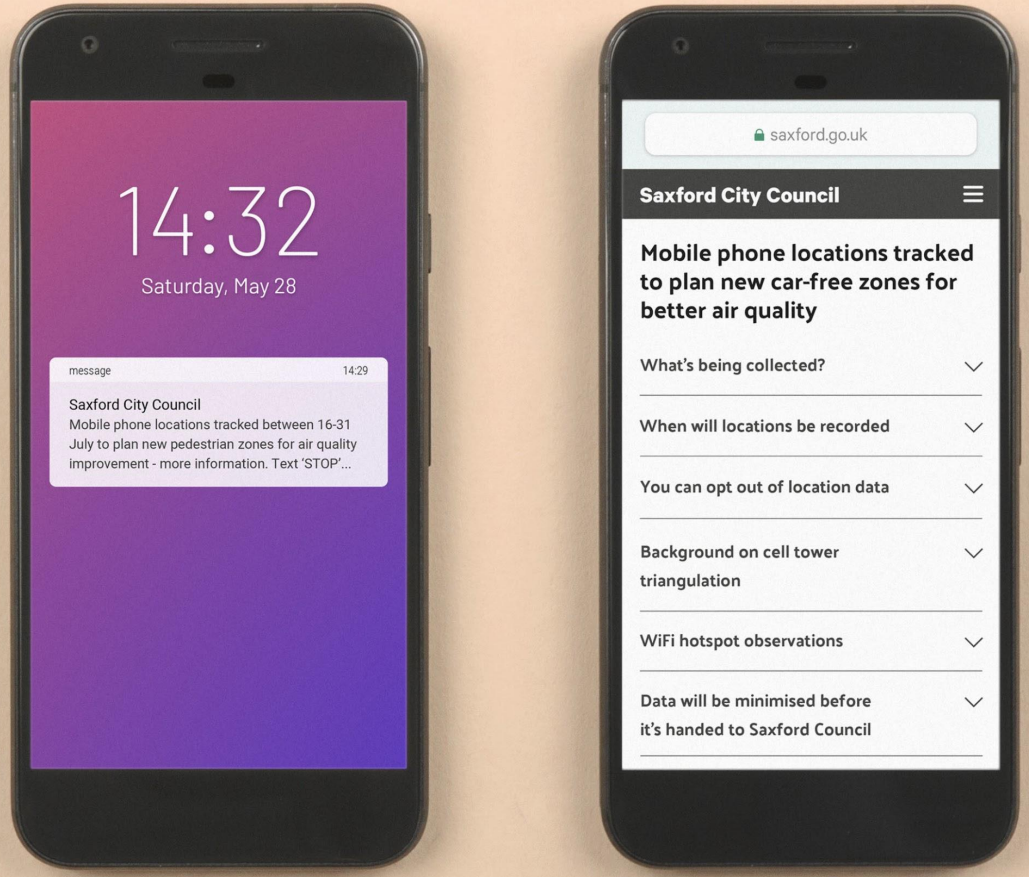
projectsbyif.com





Give public institutions the right capabilities

Create new digital infrastructure



Make people part of the process

projectsbyif.com

Give people clear ways to opt-out

A digital city needs to be inclusive, democratic and make people's lives better

Richard Pope
richard@projectsbyif.com

Projects by IF
Somerset House New Wing
London, WC2R 1LA

Data in the city: can a smart city also be a private city?

Lauren Sager-Weinstein

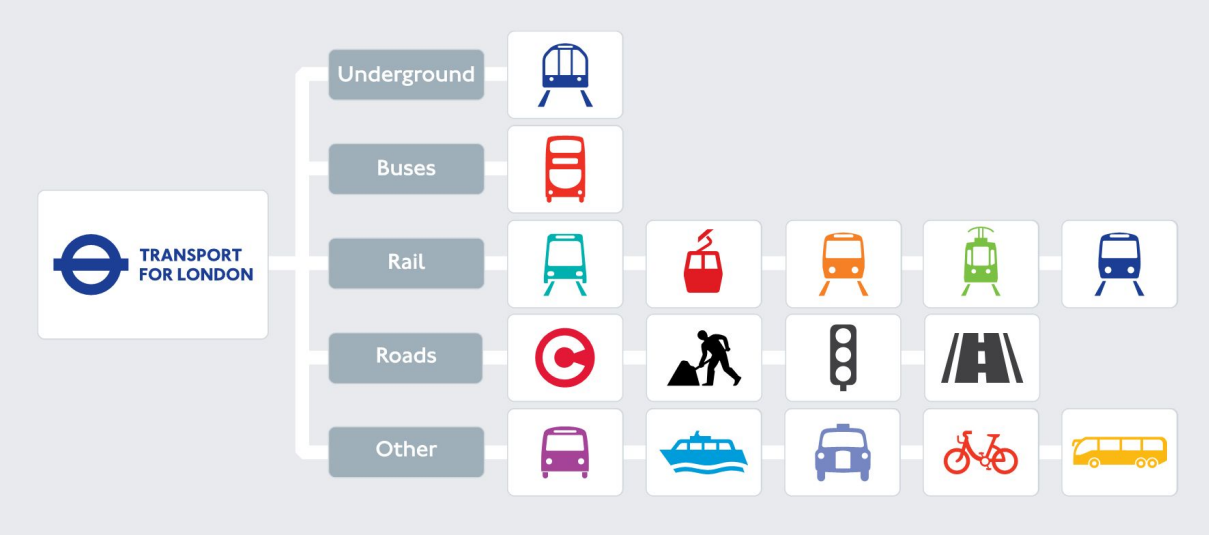
Chief Data Officer, Transport for London

@LaurenrSW

Transport Data in the Smart City

Lauren Sager Weinstein
Chief Data Officer, Technology & Data
Transport for London

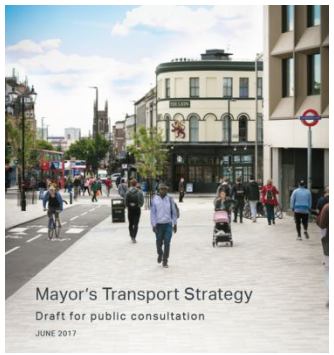
Our Purpose



- To deliver for the Mayor
- Keep London working and growing and make life better
- Every Journey Matters

Delivering for the future: Mayor's Transport Strategy

Healthy streets and Healthy People



Planning for new homes and jobs

A good public transport experience

Our data work must help deliver this

We are data rich

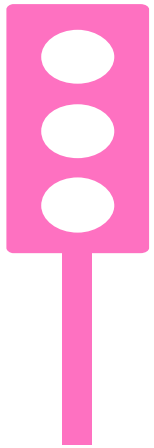
19 million smartcard ticketing transactions a day from **12 million active cards**

12 million ANPR registration plates from the **1600 cameras** across our road network

4.5 million ibus geo-located events

650,000 tfl.gov.uk website visits

15,000 SCOOT detectors creating **5.2bn** records



500,000 rows of train diagnostic data on the Central Line alone

250,000 daily train location and event data from NETMIS

DATA ITSELF IS NOT ENOUGH

We must make it useful

- Transforming data into intelligence to drive improvement

- Putting our customers at the heart of what we do
- Improving our operations & safety
- Supporting new capacity & growth

And protecting the privacy of our customers is fundamental

Personal Data and our big data approach

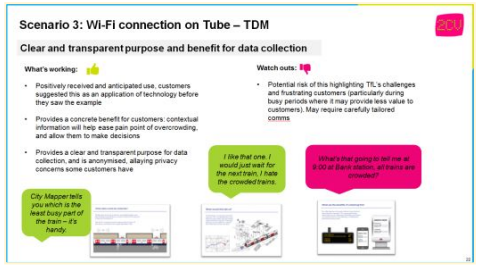
- Protecting the privacy of our customers is paramount
- We have a transparent and layered approach to privacy
  - Present information at point of collection
  - Direct people to www.tfl.gov.uk/privacy for more info
- New data initiatives involving personal data undergo a Data Privacy Impact Assessment
- Our Analytics team work very closely with our Privacy and Data Protection team
- We have regular engagement with the ICO and rely on their guidance
- When we work with our Academic Partners we use **Non-Disclosure Agreements** to safeguard data

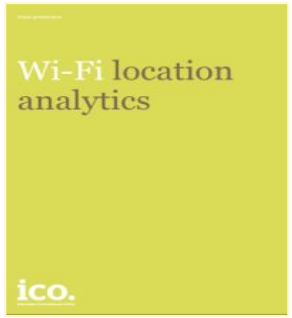
Using data transparently and protecting privacy

By transforming pseudonymised WiFi connection data into movements could this help us

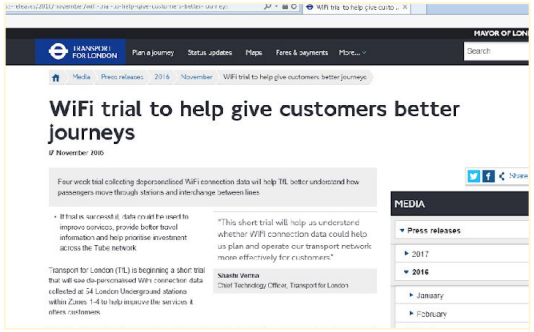
- Provide better information to customers for journey planning and avoiding congestion?
- **Operate and manage** our stations better?
- **Plan** timetables, upgrades etc. more efficiently?
- By measuring footfall, could we generate additional **income to reinvest** in our services?

Our preparation





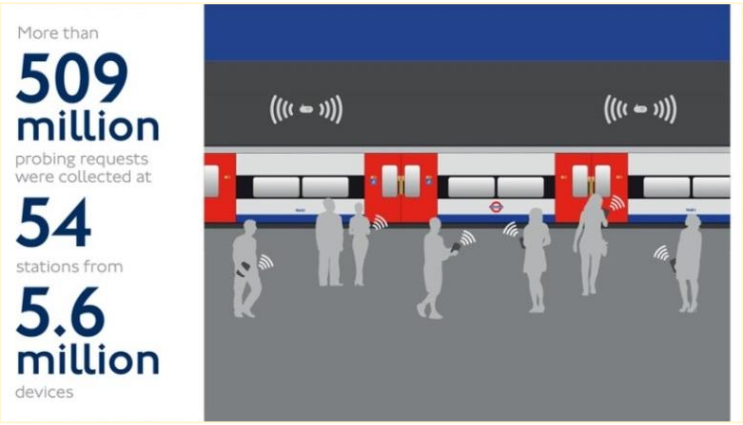
Communications



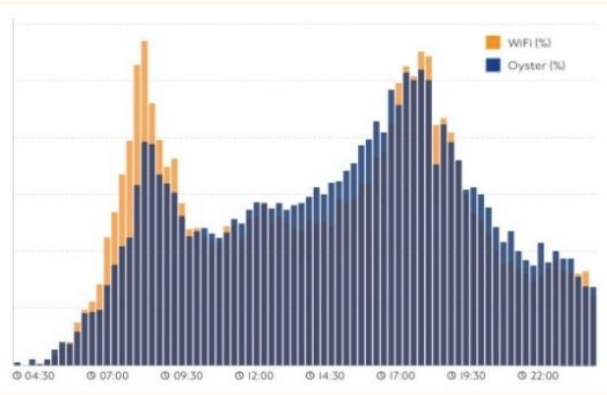
Sharing results

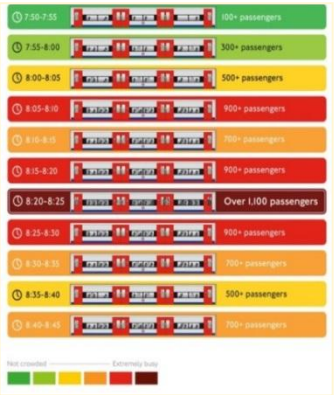
content.tfl.gov.uk/review-tfl-wifi-pilot.pdf

Data was depersonalised and analysed

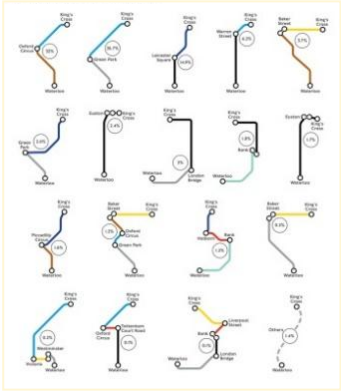


To identify busy stations and trains

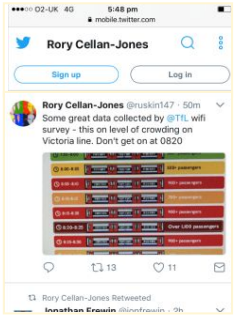




To highlight customer movements



And approach and results were positively received



"The transparency and openness shown by TfL is to be applauded. The steps taken to make customers aware of the data collection and its purpose should be seen as a blueprint for others." **– Sue Daley, techUK**

"The TfL Wi-Fi trial was a really good example of a public body coming forward with a plan, a new initiative, consulting us deeply and doing a proper privacy impact assessment."

– Elizabeth Denham, Information Commissioner

My Big Data Principles

- Programme of work targeted to TfL priorities and draft Mayor's Transport Strategy
- Focus on the right questions and the problems you face. Interesting is not enough and don't start with the data.

  As a [my job title]

  I need [big data insights]

  So that I can [make a decision my job expects me to]

- And transparency and privacy are the foundations

NestaGuest | seespark

@nesta_uk | #CityData

Data in the city: can a smart city also be a private city?

Tom Symons, Principal Researcher, Nesta (facilitator)

Theo Bass, Researcher, Government Innovation, Nesta

Rachel Coldicutt, CEO, Doteveryone

Richard Pope, Chief Operating Officer, Projects by IF

Lauren Sager-Weinstein, Chief Data Officer,
Transport for London

nesta

Refreshments and networking

Conversation points:

1. Your data initiatives
2. New technologies
3. Working with the tech sector
4. Use cases for AI

NestaGuest | seespark

@nesta_uk | #CityData

Navigating the rights and wrongs of algorithmic decision making

Eddie Copeland, Director, Government Innovation, Nesta

Rhema Vaithianathan, Co-Director, Centre for Social Data Analytics, Auckland University of Technology

Michael Sanders, Chief Scientist and Head of Research and Evaluation, The Behavioural Insights Team

Eva Blum-Dumontet, Researcher, Privacy International

nesta

NestaGuest | seespark

@nesta_uk | #CityData

An AI to the future: what are the big public-sector use cases for artificial intelligence and do we want them?

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nesta

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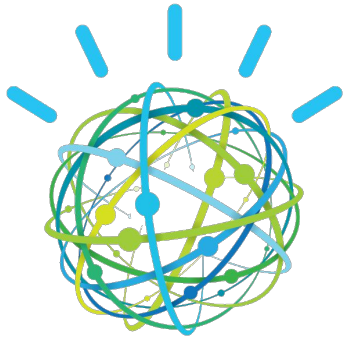
@AdamSwersky

Personalisation, social care, and the AI revolution

IBM Watson Health



Harrow COUNCIL LONDON

The challenge in social care

Growing population

Sustainability and Transformation Plans

Five Year Forward View

Personal budgets

NHS funding gap

Prevention agenda

Fall in real terms spending

The Care Act

Self Care initiative

Personal Health Budgets targets

Financial pressures

Disjointed health & social care experience

Increase in complexity

Rise in chronic conditions

Collapsing care market

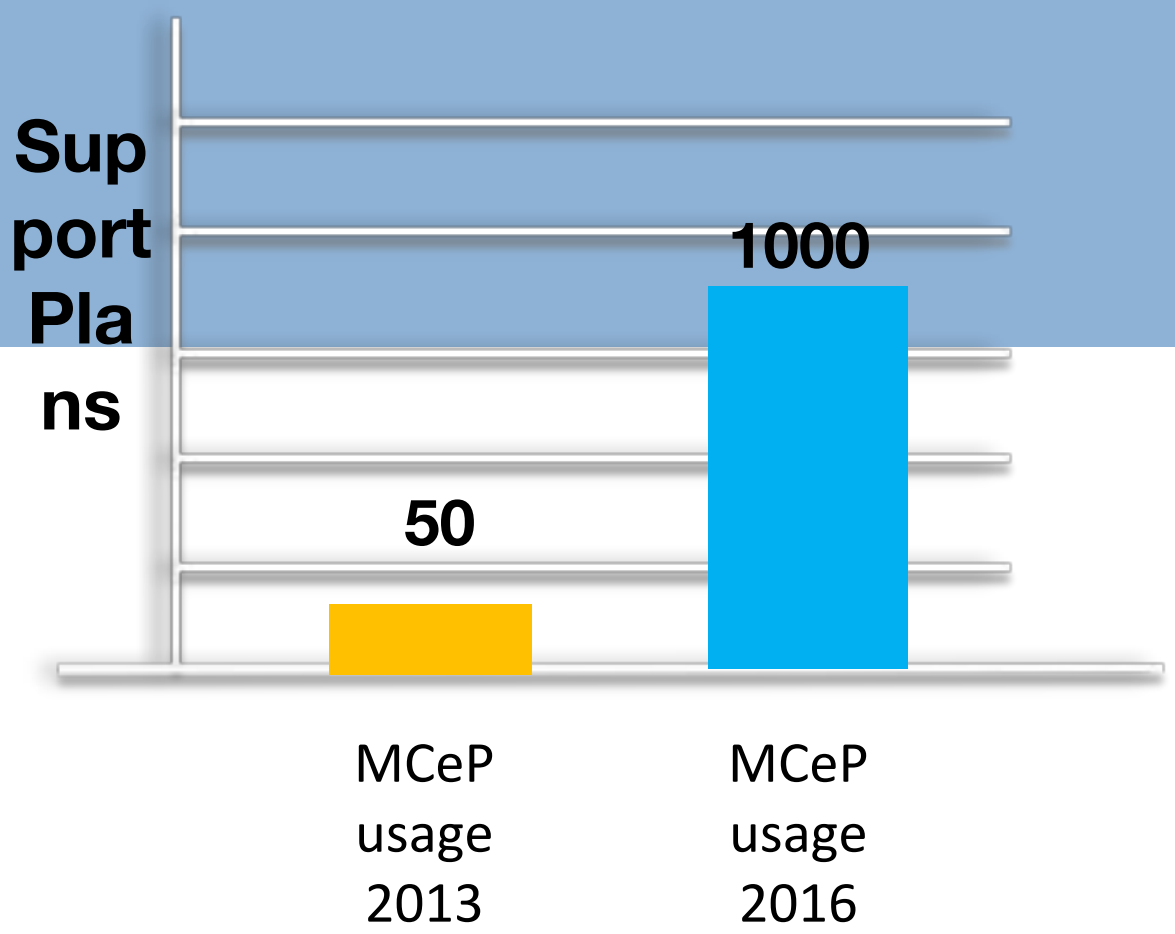
My Community ePurse (MCeP)

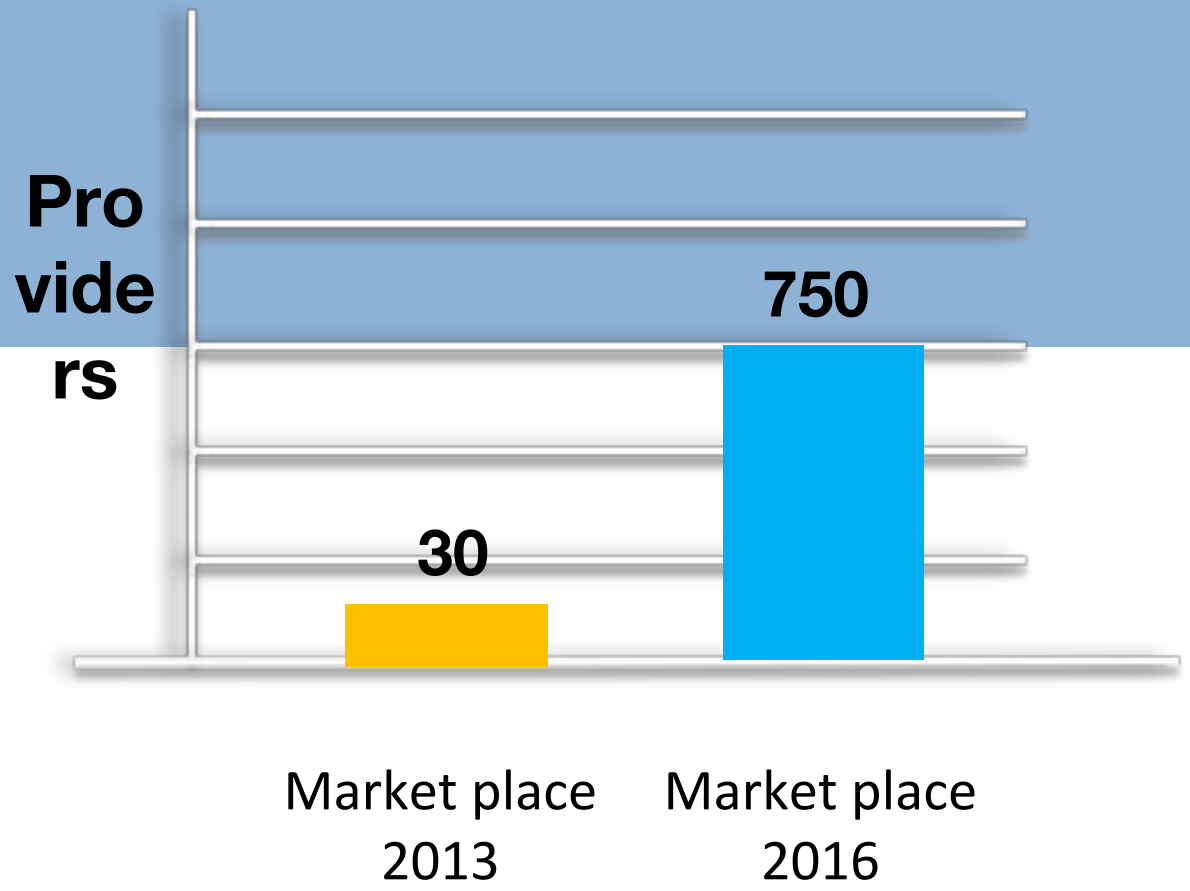
Support planning

Vibrant marketplace

Dynamic purchasing

MCeP takes off



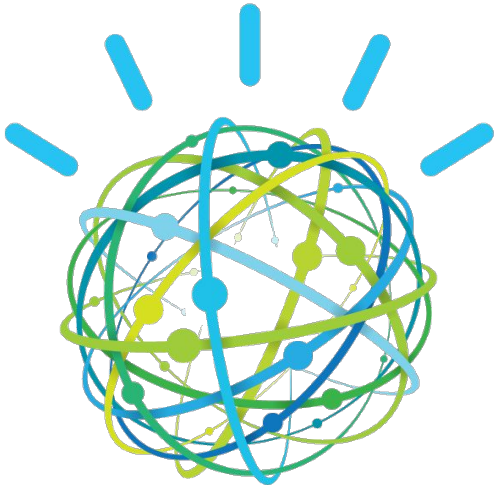


The vision: Infinity

Our vision

A new partnership

IBM WATSON HEALTH



A solution with the ability to understand, reason, and learn…

Step 1. A world-leading platform

Watson Care Manager is a cloud-based solution which leverages cognitive capabilities to support truly integrated, personalised care management

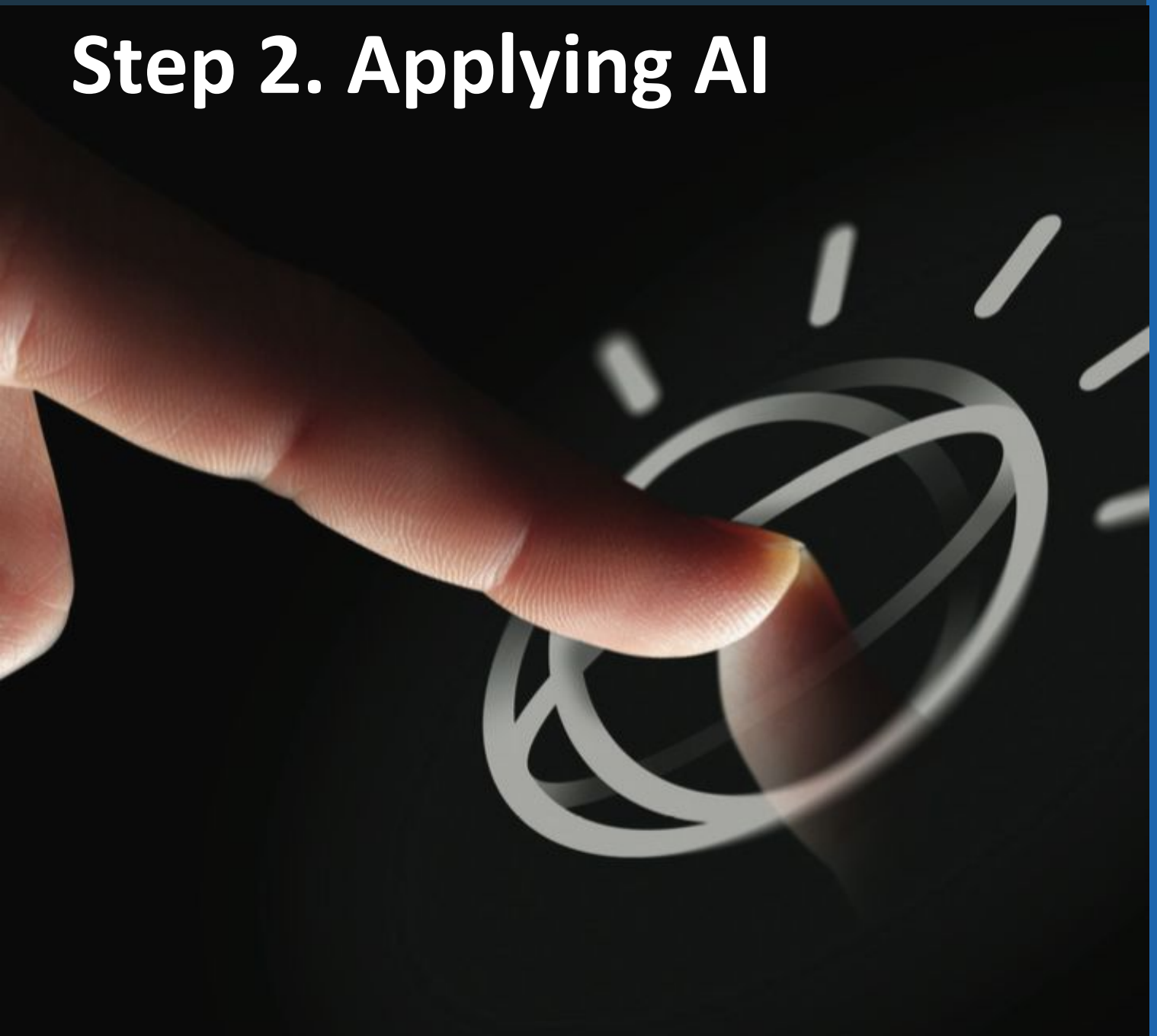
Person-centered Care Planning

Knowledge based Workflows

Performance Management

Configuration & Integration

Step 2. Applying AI



Understands, reasons, learns and interacts

Extracts and derives meaning from structured and unstructured content–at scale
Consume 4 billion pages of medical research in 1 minute

Provides analyses across vast arrays of criteria to transform decision-making
Understand your patient's health and social needs

Dynamically updates hypotheses based on variable chains of evidence
Leverage the power of genomics to design individualized care plans

Harnesses entire bodies of knowledge
Access proven healthcare and process expertise

Appendix: Benefits of MCeP

- Removes barriers to personalisation: no bank account; no invoices / receipts
- Improved **audit** and governance. Council has full view of all transactions from Personal Budget in real-time
- Quality standards improve Safeguarding
- Improved service user journey, user empowerment – co-produced system with care navigators rather than social workers
- Greater use of **preventative, community-based** services
- **Significant savings** (up to 7% spend) through reduced processing costs in Council and in providers

Block ← Traditional commissioning → Public Organisations

£££££ Community Care/CCG Budget £££££

Private

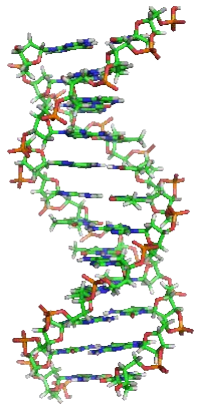
In-house

Voluntary Organisations

Social Enterprises

Provision of service

Individualised



Transformation

Self Directed Support

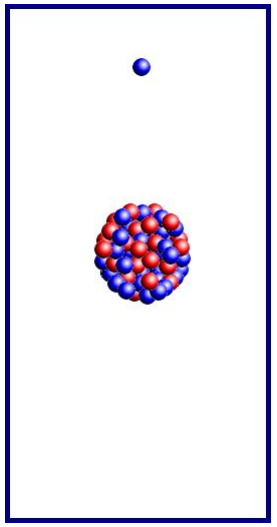
Splitting the atom

My Community ePurse MCeP

1,000 personal budgets

1,000 potential micro commissioners / citizens

Public commissioners



An AI to the future: what are the big public-sector use cases for artificial intelligence and do we want them?

James Rolfe

Executive Director, Resources, London Borough of Enfield

@jrolfe67

Our AI Journey….

James Rolfe
Executive Director - Resources
London Borough of Enfield

The Enfield story

Enfield and the challenge we faced

Enfield's solution

How does AI fit and why Amelia?

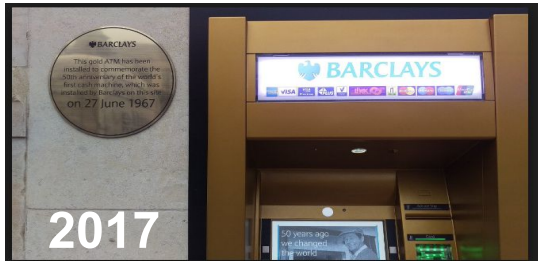
Who and what is Amelia?

Is it working?

ENFIELD Council

Enfield, who are we?

- 5th largest of the 33 London boroughs
- 331,395 residents increasing by c10,000 pa
- Employing 3,290 people *(June 2017)*
- Children and young people, 23% of the population, the 4th highest proportion in London
- Older people aged 65 or over, nearly 13% of residents, the 11th highest in London
- There are over 10,000 businesses providing 117,000 jobs
- More than 40% of the Borough's area is green space



Rising resident demand against backdrop of budget cuts

Innovation is a priority for government

How to provide 24/7 access to information and services for 330,000 residents?

…population growing by 10 thousand every year

…more than 55,000 calls a month and 5000 face to face appointments per month

…more than 35,000 website visits a day

…providing service over more than 300 business processes

ENFIELD Council

Our response “Enfield 2017”

- Engaged PwC in 2013 to develop an ambitious blueprint and roadmap for the Council’s transformation

The Enfield 2017 initiative was a significant transformation project designed to overhaul service delivery to the citizens of Enfield, through the investment in digital technology and innovation. The key driver behind the project is to reduce the cost of delivering services to customers by enabling customer self-service via the council’s website.

ENFIELD Council

Our approach

- Customer focussed design
- Intelligent/insight led transformation
- Digital customer transformation, service delivery redesign, front and back office transformation
- Process simplification and standardisation
- Digital and technology alignment

ENFIELD Council

The outcomes

- A strong baseline established bringing credibility to the business case and recommendations
- £36 million savings identified and realised
- Knowledge transfer plan executed with the organisation's change team
- Future 'digitally enabled' Service Enabling design co-created and approved with the business
- Reduced demand in the Contact Centre
- A new consolidated Assessment Hub designed (self-serve enabled, bringing together core 'assess' and 'eligibility' processes from across the council into common teams)
- Improved understanding of future service demands from detailed Customer profile data

ENFIELD Council

Solution = Digital Transformation

How to generate substantial savings while maintaining the widest range of services

…embark on arguably largest investment in ICT by a single Local Authority

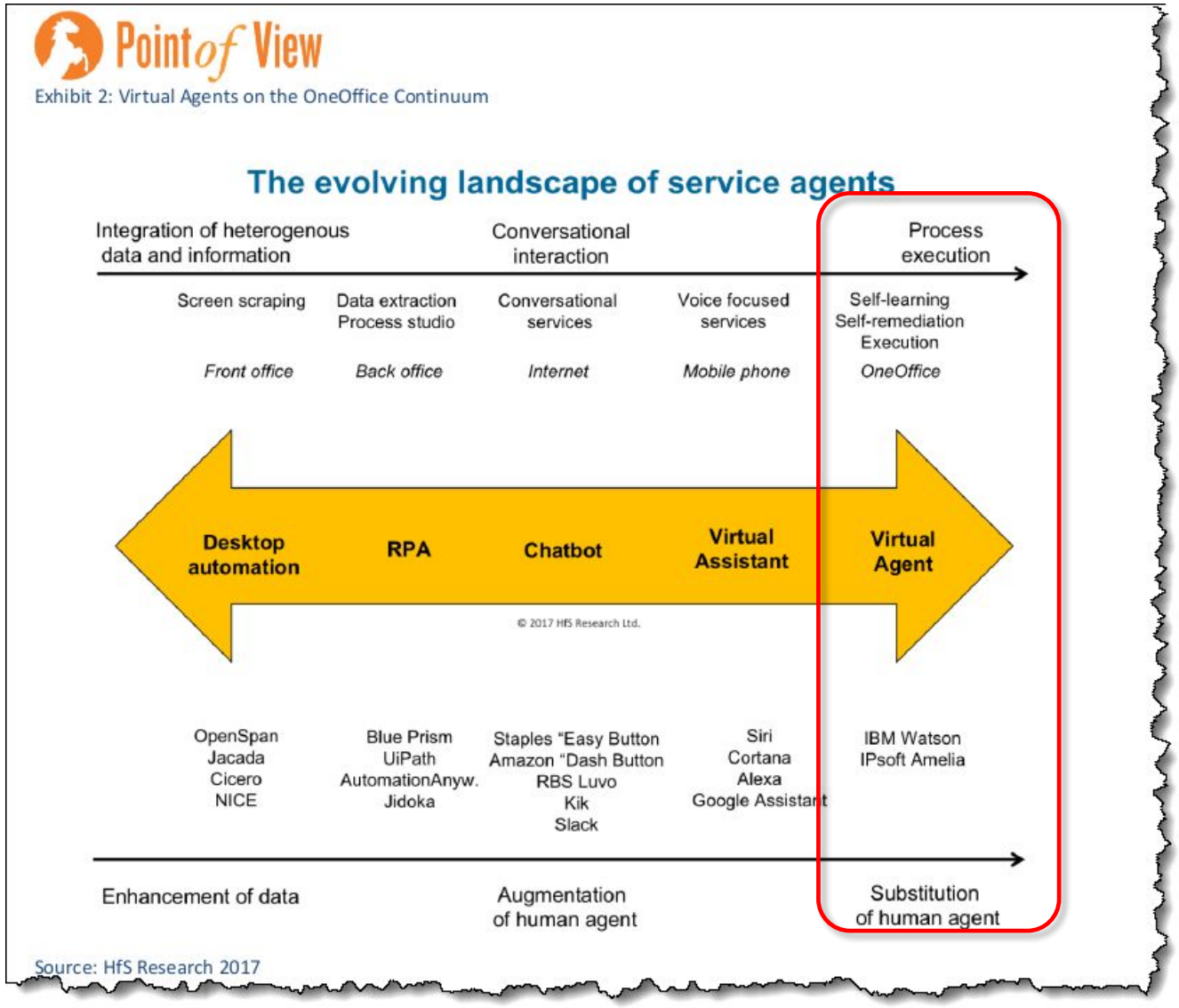
…restructure the Council in cross cutting hubs to provide customer facing services, based on customer journeys

…implement the most significant digitisation of services – over 475 forms, Benefits Calculator, +50 benefits forms, Council Tax, Housing Benefit, Homelessness, online evidence, data driven through use of Power BI

…centered around the ‘Enfield Connected’ account

ENFIELD Council

AI as part of the Digital Strategy – why choose Amelia?



Wanted to release front line staff to give more targeted support to those with the greatest need

- Self-learning, cognitive technologies can best replicate the human interface
- Chatbots limited to linear, predictable, and programmable dialog paths that don't align with natural language flow*
- Rise of data-driven apps enable true cognitive platforms to have more intimate and relatable interactions . . . more meaningful interactions and success
- Better alignment with a company's digital-first strategies to transform their business with scalability, reliability, and better CX

ENFIELD Council

Enfield’s cognitive agent - Amelia

Our **starting point is a Cognitive Planning Permission advisor** that will:

- **Conduct a conversation** with residents on their proposed developments, **providing clarifications** step by step
- **Advise** whether planning permission is required, explaining the criteria
- **Be able to guide** residents on **next steps** depending on the planning permission required

ENFIELD Council

Underlying complexity: planning permission requires extensive knowledge of 32 different processes

1. Adverts & Signs
2. AirSource Heat Pump
3. CCTV
4. Decking
5. Dropped Kerb
6. Extension
7. External Walls
8. Fascia
9. Fences, Gates, Garden Walls
10. Flue, Chimney, Soil, Vent
11. Fuel Tanks
12. Garage Conversion
13. Ground Source Heat Pump
14. Hard Surfaces
15. Lighting
16. Loft Conversion
17. Maintain Drainpipes
18. Manhole & Drains
19. Outbuilding
20. Party Walls
21. Patios & Driveways
22. Porches
23. Re-roofing
24. Roof windows
25. Satellite Dishes, Aerial
26. Security Alarm
27. Solar Panel
28. Trees & Hedges
29. Underpinning & Foundations
30. Wind Turbines
31. Windows & Doors
32. Glossary

Our deployment journey

Design

- Identify **Business Areas** to cover
- Gather **regulation and policy documents**
- Define **user stories** in a format of a question or a set of regulation or policies
- Design **optimal flow**
- Provide **keywords** and **synonyms** for Business Areas and questions
- Create a **Process definition document**

Develop

- **Develop assets** to use, e.g. regulation reference snippet
- Design **User Interface**
- **Integrate** solution to business systems
- **Train Amelia** on content and processes
- Build **humanisation**
- Develop **product demos**
- Ensure **internal adoption**
- Perform **system testing** (functional & performance)
- Perform **business testing** (destructive)
- Customer testing

Launch

- **Different options:**
  - **Soft launch internally** to selected group
  - Complete **hidden live** to selected customer group
  - **Run** a **pilot** to selected group of external users
  - **Full** launch
- **Monitor results** to ensure continuous improvement

ENFIELD Council

Summary

Enfield incorporated AI into its digital transformation

Amelia selected as a cognitive assistant to replicate human interfacing

Maximise our increasingly scarce resources on those with greatest need

Enfield learnt how to get best out Amelia

IP Soft learnt how Amelia can support Local Government

Established a cost effective process for future development

ENFIELD Council

Thank you for your time

James Rolfe
Executive Director - Resources
at London Borough of Enfield

ENFIELD Council

An AI to the future: what are the big public-sector use cases for artificial intelligence and do we want them?

Maryvonne Hassall

Digital Programme Director, Aylesbury Vale District Council

@AylesburyVale

Aylesbury Vale
District Council

Aylesbury Vale and AI

Maryvonne Hassall
Digital Programme Director
Aylesbury Vale District Council

DigitalGenius
Human+AI Customer Service

Aylesbury Vale District Council

AI in Customer Services

What?

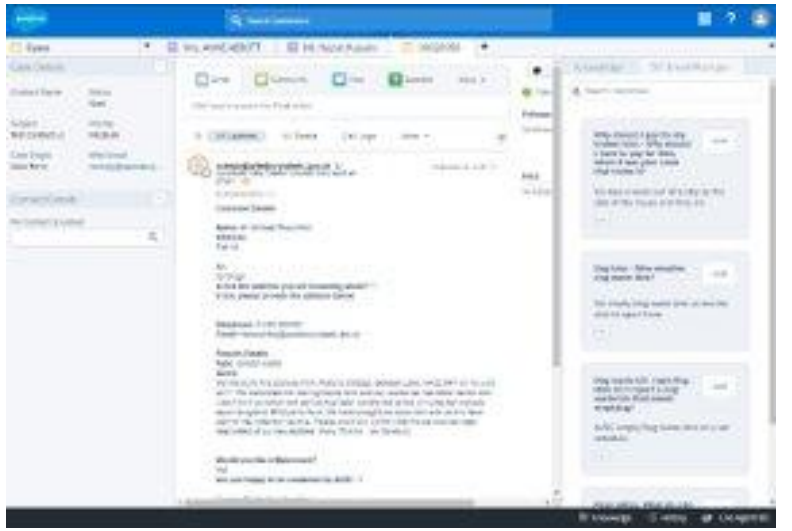
Webchat and email

Assisted Agent

Go live – July 2017

Annual billing

Automation



Why?

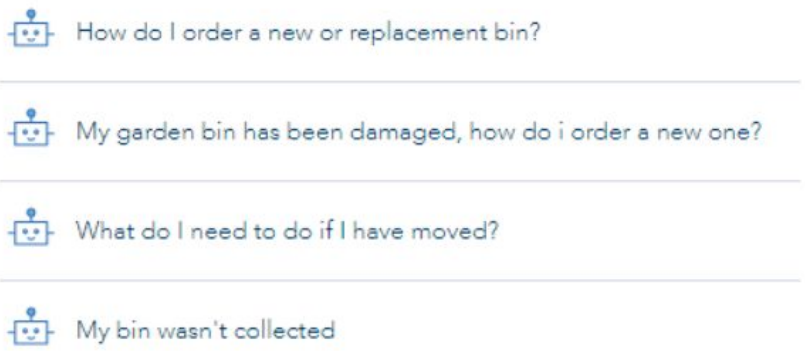
Customer expectations

Efficiency expectations

Salesforce

Single knowledge base

Dynamic Partner



Aylesbury Vale District Council

Skills

How?

- Initial 4 month pilot
- Proven results
- One year deal
- Incremental step

Our commercial behaviours framework

- Cultural change
  - New behaviour set
  - New customer facing roles
  - New energy and enthusiam

Aylesbury Vale District Council

Results and Feedback

“Amazing service!!”- Sueann Wan

"An online chat line is a perfect way to get hold of someone to answer questions. Yes my query was all sorted."- Sam Whittome

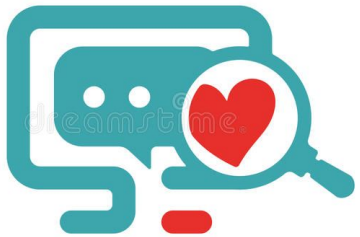
“Very helpful thank you Stacey”- Stacey Moult

“The agent was very helpful”- Stacey Moult

“Thanks to Sueann, the help was most effective and efficient - a credit to your customer services.”- Sueann Wan

Quick helpful advice- Matthew

Yes a very good and efficient service. Saved me calling in whilst at work and this chat was excellent- Stacey



Webchat stats

Total for April 11,551

March / April

50% / 57 % unedited

51 / 282 auto responses

Aylesbury Vale District Council

Our Learnings

- Better with more data
- Needs good quality data
- Skewed (biased) to input data set
- Not a silver bullet (too hyped)
- Needs monitoring
- Staff roles change
- Good at standard, repeatable, consistent
- Good for 24 X7 , out of hours
- Works well alongside staff

Aylesbury Vale District Council

Where next?

Current projects

- Out of hours
- Automation
- Routing
- Auto contact creation
- Voice

Next

- **Complete data sweep**
- **Pattern identification**
- **Customer profiling**
- **Predictive analytics**
- **Targeted marketing**
- **Close customer services**

Aylesbury Vale District Council

Thank You

@aylesburyvale

Maryvonne Hassall

mhassall@aylesburyvaledc.gov.uk

01296 585001

www.aylesburyvaledc.gov.uk

An AI to the future: what are the big public-sector use cases for artificial intelligence and do we want them?

Danny Buerkli

Programme Director, Centre for Public Impact

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NestaGuest | seespark

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Danny Buerkli, Programme Director, Centre for Public Impact

nesta

Closing remarks

Eddie Copeland

Director, Government Innovation, Nesta

@EddieACopeland