

# Experience, Business Models and Case Study of Open Data in UK



Andrew Stott

UK Transparency Board  
*formerly* Director, *data.gov.uk*  
& UK Deputy GCIO

Taipei  
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@dirdigeng  
andrew.stott@dirdigeng.com

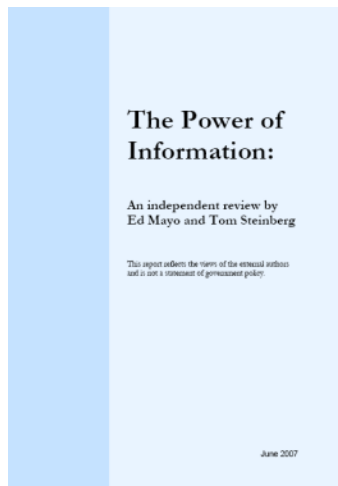


# Presentation Contents

- Drivers of UK Open Data Policy
- Business Models for Open Data
- Ecosystem for reuse of Open Data
- How data.gov.uk was developed
- Lessons Learned
- Unforeseen additional benefit

# Drivers of UK Open Data Policy

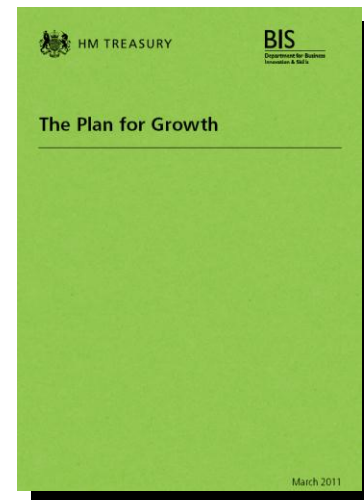
## Economic Growth and Social Value



June 07



Feb 09



Mar 11

## New economic and social value

# New Businesses

Spikes Cavell  
KNOW, KNOW, KNOW

[GO >](#)  
[LOG IN](#)

[Home](#)



## DELIVER CASH SAVINGS

WITHOUT COMPROMISING  
FRONT-LINE SERVICES

[A procurement savings blueprint...](#)

### Spend & Contract Visibility

Profile your spend to find savings, identify opportunities to aggregate...

### Transparency

Improve the accessibility, relevance and value of the spend data...

### Performance

Evidence your progress, create context through comparison...

### Sustainability

Measure and manage CO<sub>2</sub> in the supply chain...

### Data Transformation

Our highly experienced team rapidly transform your spend, supplier and contract data into actionable business intelligence regardless of the completeness, accuracy or fitness for purpose of the source.

# Social value and cohesion



home news popular articles blogs our flickr our youtube pnp live! 2011 e  
about contact us my account



## Stoke-on-Trent News & Politics From Pits n Pots

We report the latest and breaking political news from Stoke-on-Trent City Council and the political parties in the city.

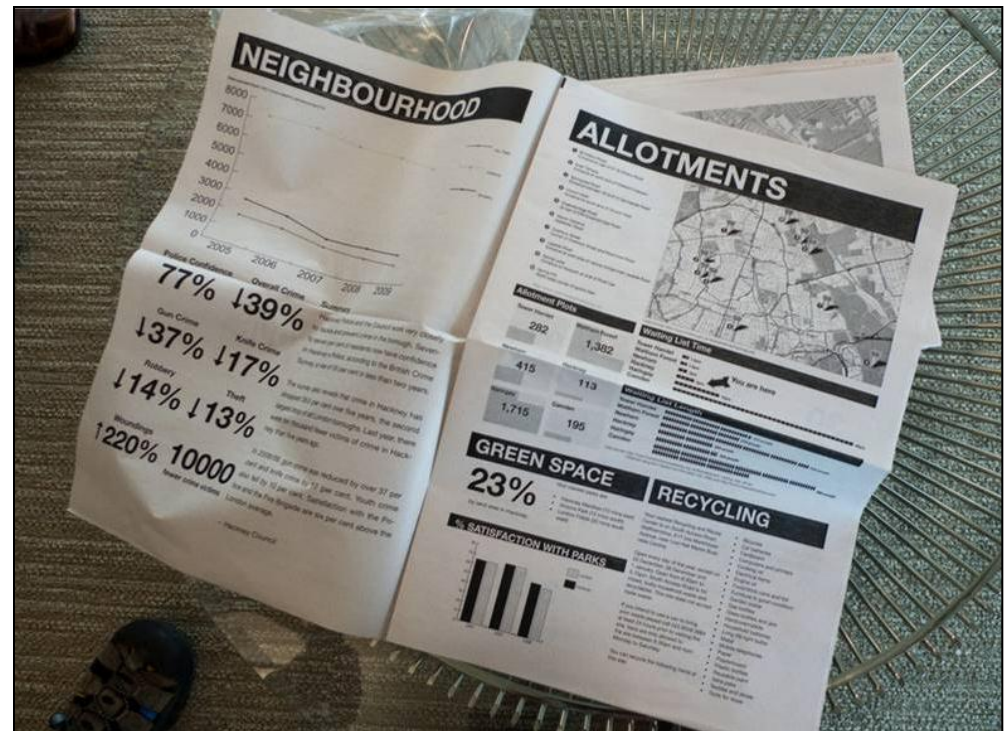
user login

Username: \*

Find us on Facebook



118 people like Pits n Pots.



No N  
Staff  
Stok

## Children's Scrutiny Chair Slams Council Report And Demands Urgent Meeting

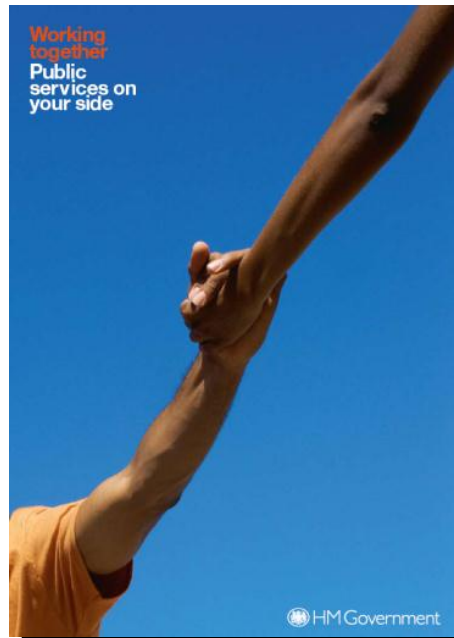
Dave Conway Slams Quality of Report To C&YPS O&S

## Senior Council Officers Shun Stoke-On-Trent

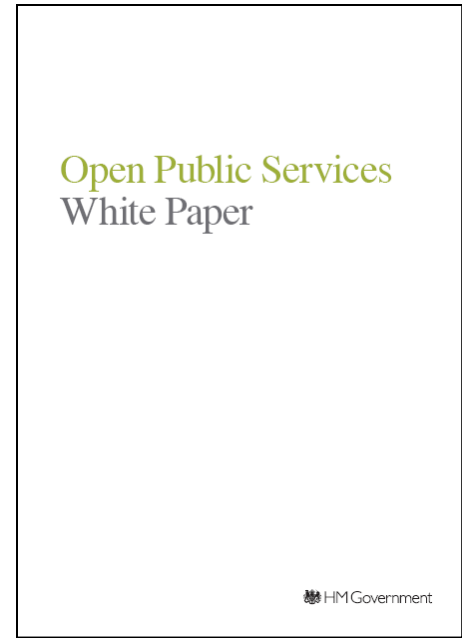
Who Would Live in a City Like This? -Not Officers!



# Improve Public Services & Enhance Choice



Mar 09



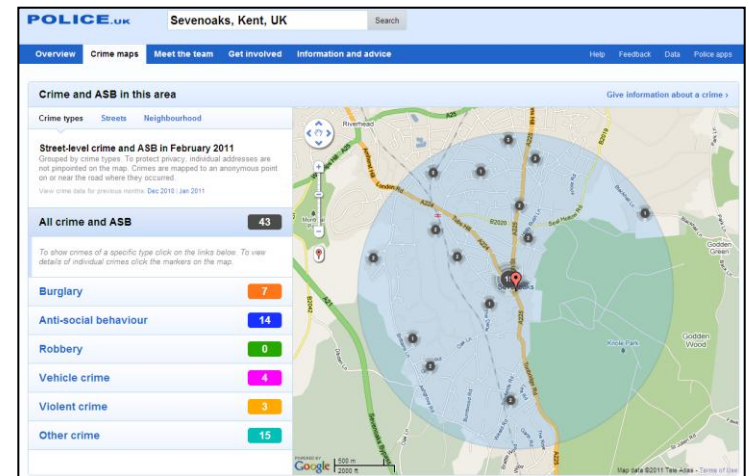
Jul 11

**Improve public services**

**New economic and social value**

# Benefits: Improving Public Services

- Gives “local” view of services
- Gives “holistic” view of all local services
- Allows people to give feedback, lobby for improvement, participate in policy-making
- New apps reach people who do not visit government websites
- Information presented in more relevant ways





# Transparent and Accountable Government



Jun 09

May 10



**Transparent & Accountable Government**

**Improve public services**

**New economic and social value**

# Benefits: Accountable Government

- Transparency allows citizens to hold government to account for what they do
- Strengthens pressures to comply with ethics codes - decisions and spending are more public
- Puts pressures on suppliers to be fair in dealing with government
- Politicians judging that it's more important to be open than to avoid criticism



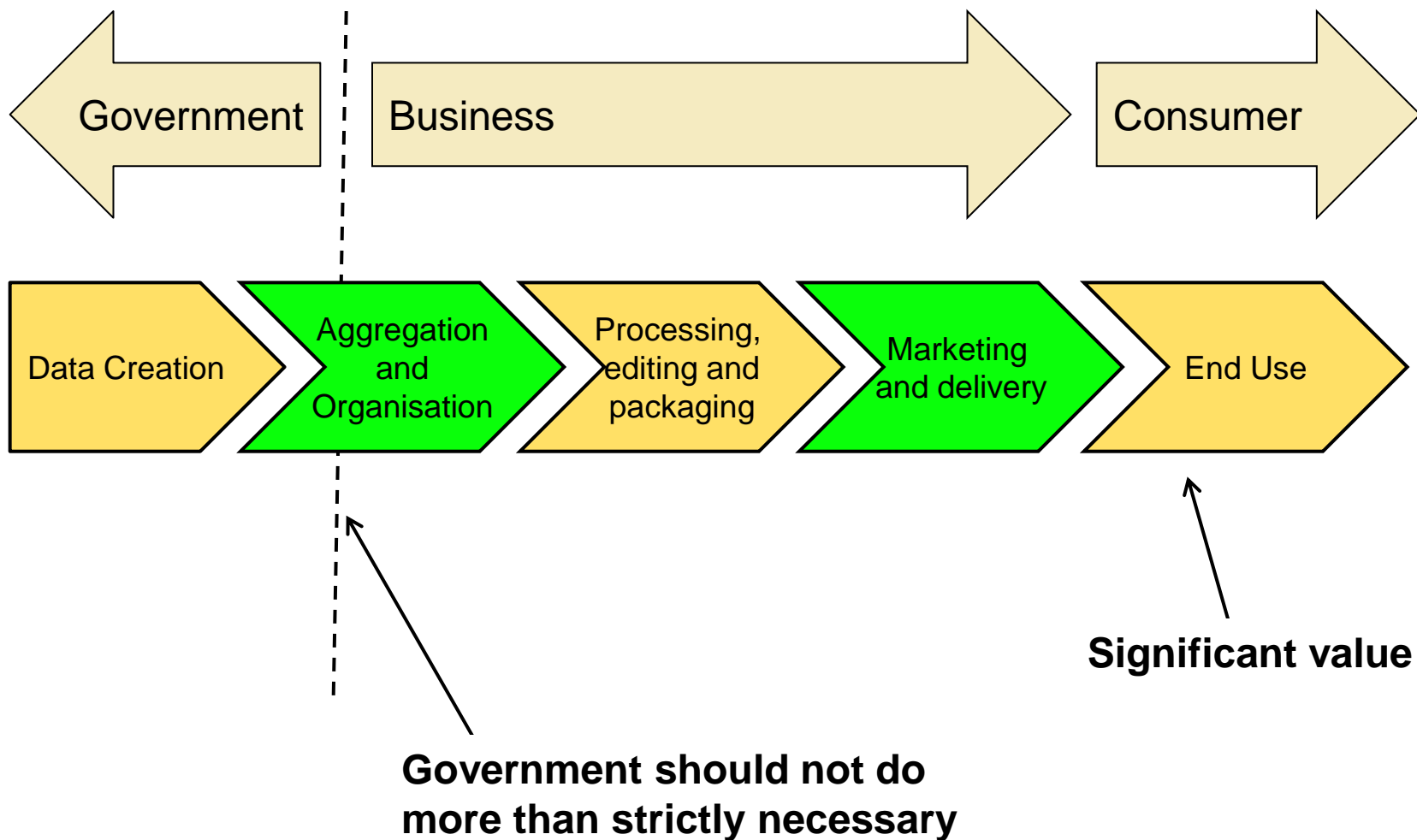
# **Business Models for Open Data**

## Evidence for EU PSI review

- EU27 direct gains from completely open access to PSI could be ~ €40 Bn
- Aggregate economic impacts could be even larger: ~€140 Bn
- Direct market associated with PSI use less important than spillovers and new uses.
- Future innovations due to easier access add further economic and social benefits
- Costs and revenue foregone? ~ € 1 bn

Source: Graham Vickery, Information Economics

# Public Data Re-Use Value Chain



# Emerging Business Models



# Cleansing and organising data

The banner features a background image of a red pushpin on a document with various numbers and percentages. The text is overlaid on this image.

**Spikes Cavell**  
KNOW, KNOW, KNOW

Search  [GO >](#) [LOG IN](#)

[Home](#)

## DELIVER CASH SAVINGS

WITHOUT COMPROMISING  
FRONT-LINE SERVICES

[A procurement savings blueprint...](#)

Spend & Contract Visibility	Transparency	Performance	Sustainability
Profile your spend to find savings, identify opportunities to aggregate...	Improve the accessibility, relevance and value of the spend data...	Evidence your progress, create context through comparison...	Measure and manage CO <sub>2</sub> in the supply chain...

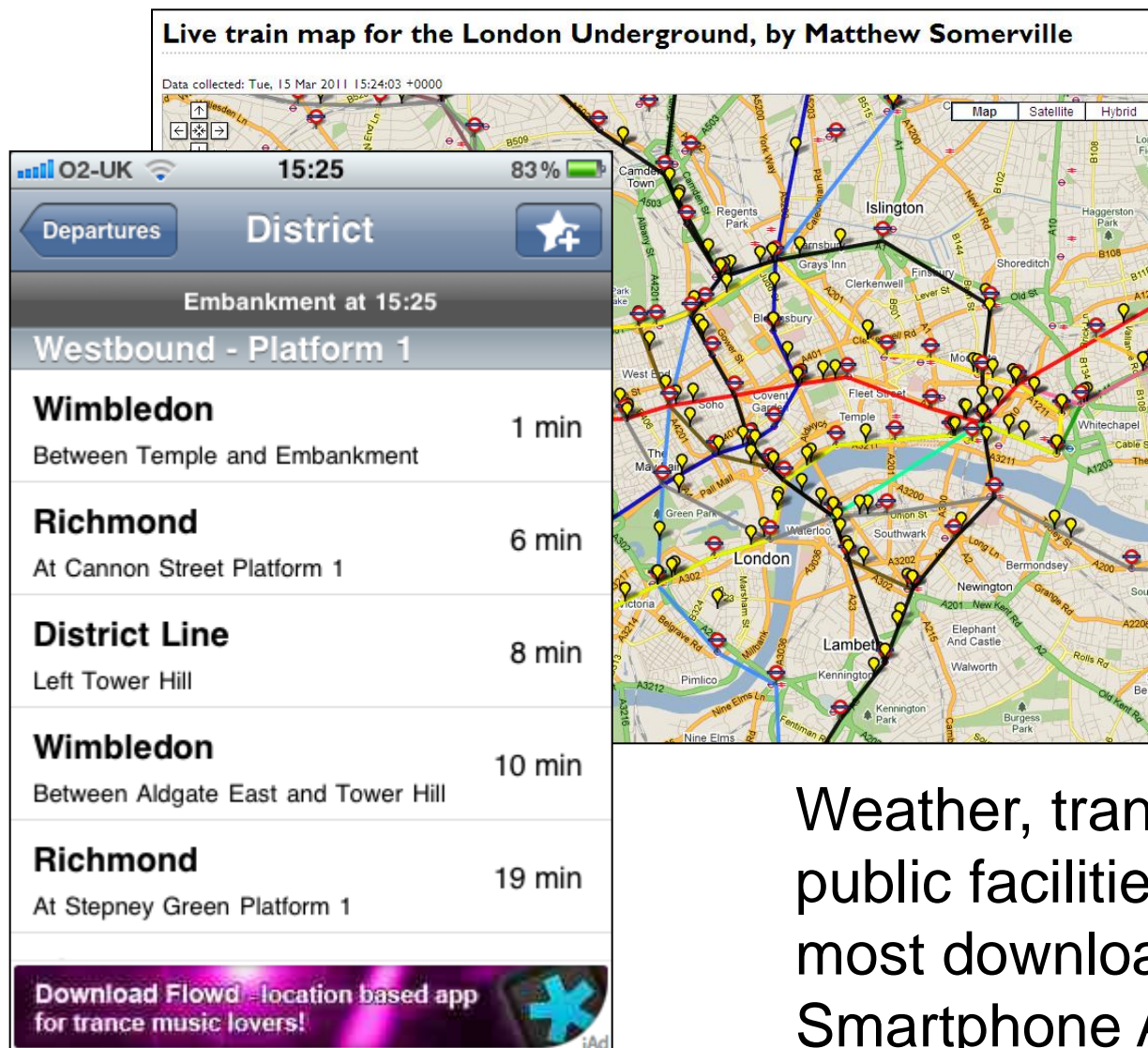
**Data Transformation**  
Our highly experienced team rapidly transform your spend, supplier and contract data into actionable business intelligence regardless of the completeness, accuracy or fitness for purpose of the source.

Business Intelligence from item-level  
purchasing data

# Information services to the public

**Live train map for the London Underground, by Matthew Somerville**

Data collected: Tue, 15 Mar 2011 15:24:03 +0000



Map Satellite Hybrid

15:25 83%

Departures District

Embankment at 15:25

Westbound - Platform 1

<b>Wimbledon</b>	1 min
Between Temple and Embankment	
<b>Richmond</b>	6 min
At Cannon Street Platform 1	
<b>District Line</b>	8 min
Left Tower Hill	
<b>Wimbledon</b>	10 min
Between Aldgate East and Tower Hill	
<b>Richmond</b>	19 min
At Stepney Green Platform 1	

Download Flowd - location based app for trance music lovers!

iAd

Weather, transport and public facilities among most downloaded Smartphone Apps

# Data Mining

**PharmaTimes** ONLINE

News Magazine JobSearch Competitions Events/Meetings Gallery

WORLD NEWS | UK NEWS | CLINICAL NEWS | FREE NEWS HEADLINES | FREE RSS FEED

Where am I? > Article

## Govt open data policy "set to boost UK life sciences growth"

UK NEWS / WORLD NEWS | DECEMBER 01, 2011

SHARE

Tweet

1

11

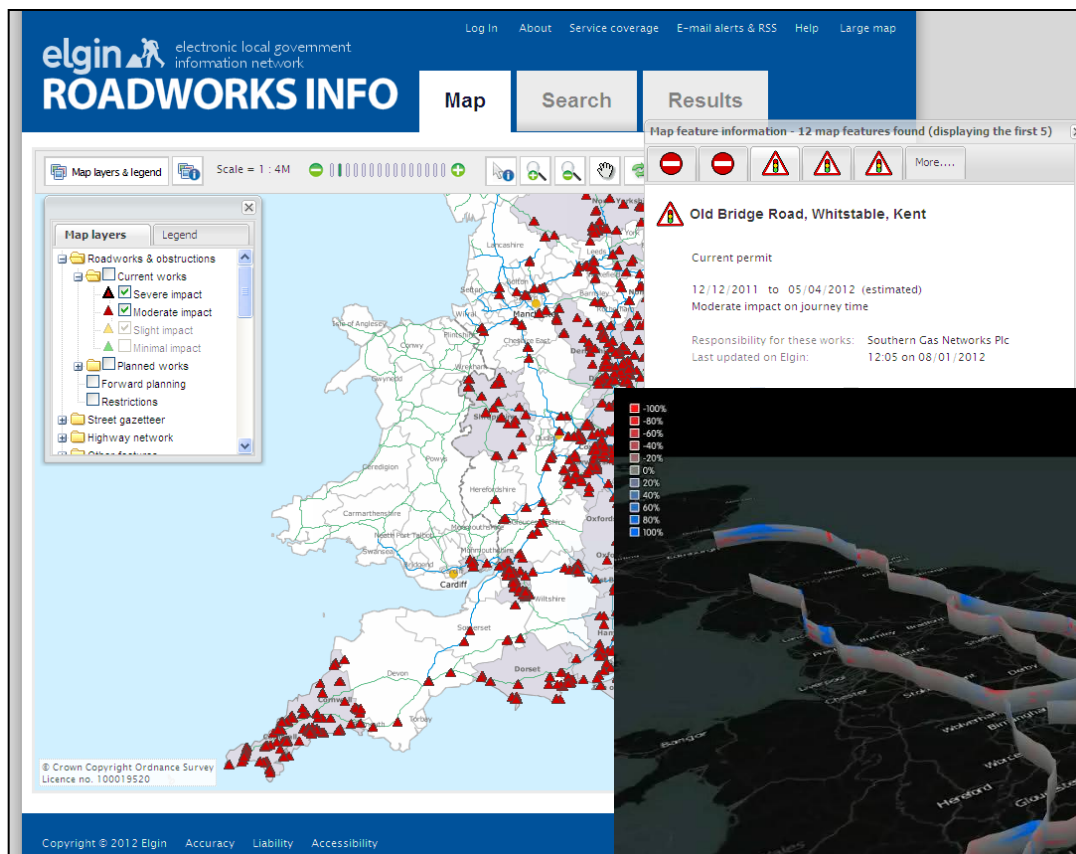
The UK government's Autumn Statement includes "world-leading commitments" to boost growth in the nation's life sciences sector by transforming access to public-sector health and care data.

From next September, services provided by the NHS Information Centre for Health and Social Care will link datasets from primary and secondary care, which will enable professionals in the NHS, pharmaceutical industry, academia and elsewhere to access unprecedented and unequalled levels of information about the journeys of patients through the care system and the outcomes of different treatments, it says.



- Prescription data
- Patient outcome data
- Longitudinal health records
- Pupil-level education records

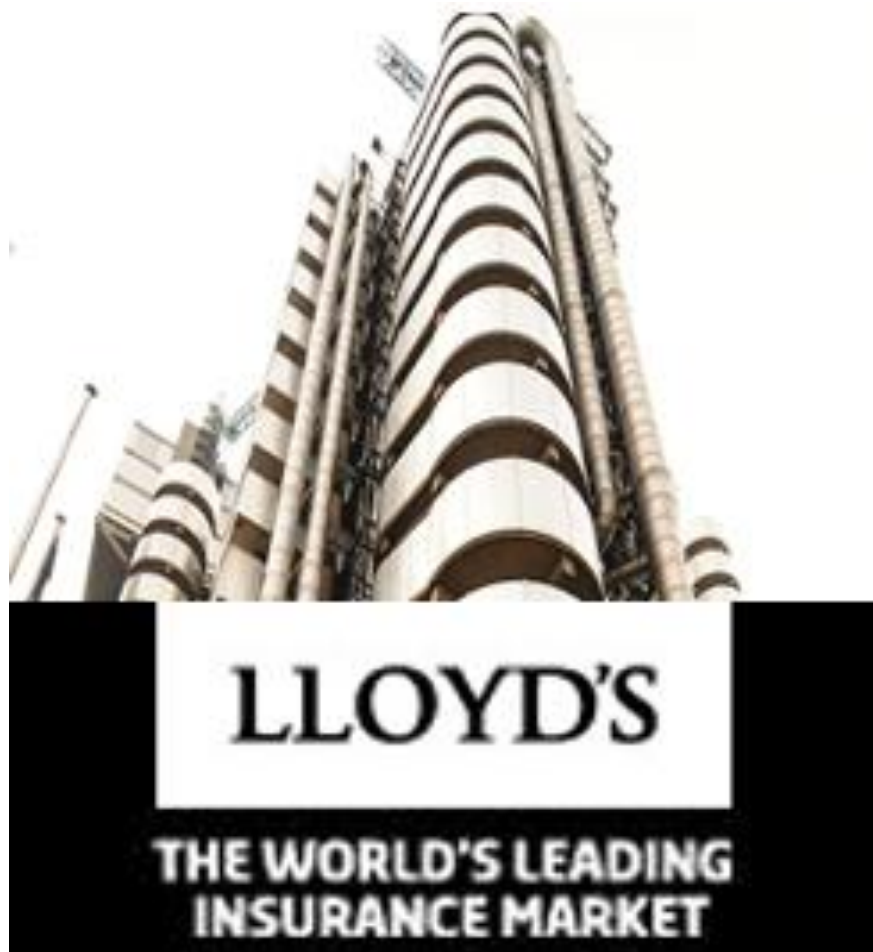
# Operational efficiency/optimisation



Real time info on road delays and roadworks allows logistics efficiency

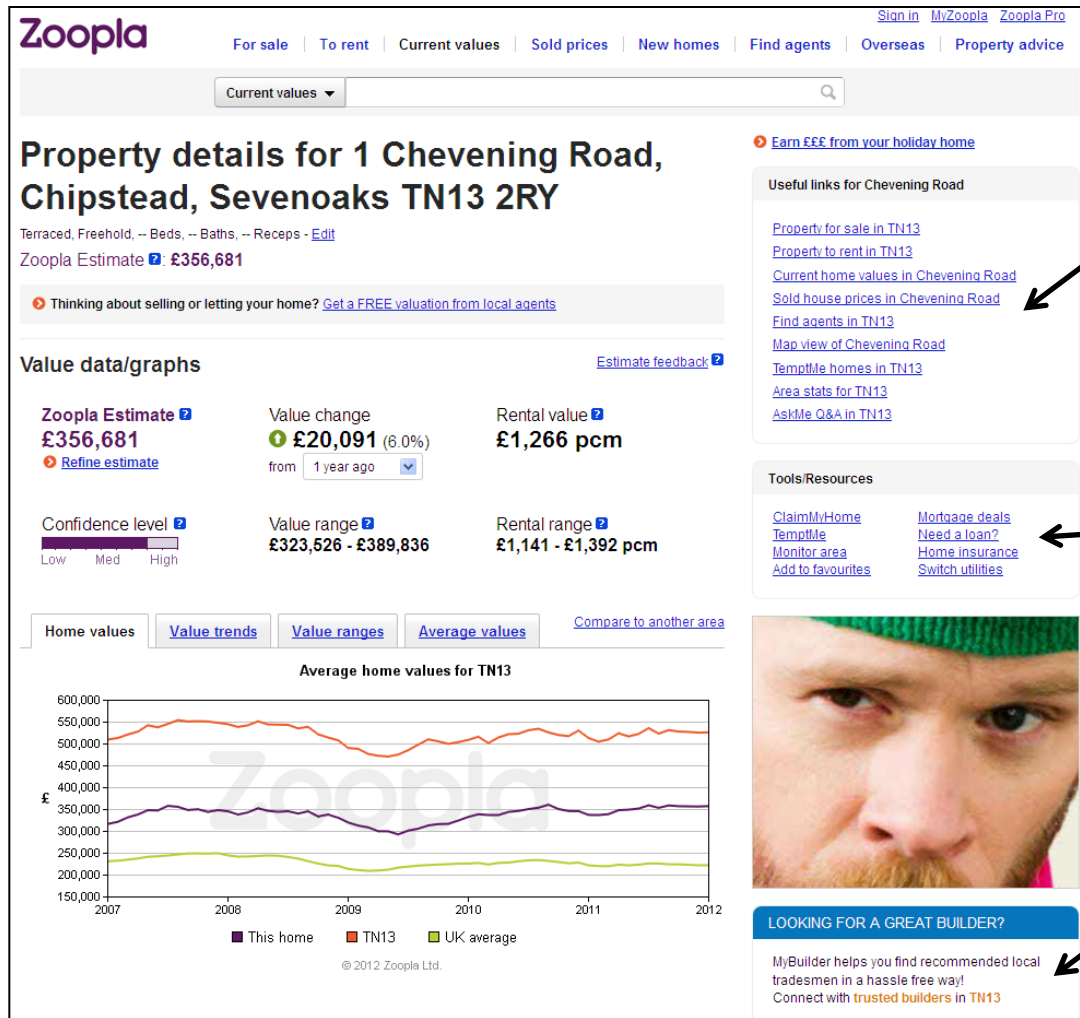


# Financial Products



- Weather Risk Management (US: \$4bn annual contracts value)
- Flood insurance on detailed topography and river records

# Customer attraction and retention



estate  
agents/  
realtors

Financial  
services

builders and  
other local  
services

Local house prices attract potential customers



# Data Broking

The screenshot displays the Windows Azure Marketplace interface. At the top, the navigation bar includes the 'Windows Azure Marketplace' logo, a 'Region' dropdown set to 'United Kingdom', 'Support', and 'Sign In' links. Below this is a secondary navigation bar with 'Learn', 'Applications', 'Data', and 'My Account' tabs, alongside a 'Search the Marketplace' search bar. The main banner reads 'One-Stop Shop for Premium Data and Applications' with the tagline 'Hundreds of Apps, Thousands of Subscriptions, Trillions of Data Points'. A central featured tile for 'ComponentArt World Data Dashboards' is highlighted, showing a world map and various data visualizations. To the left of this tile is a 'SOCIALthuzi' tile for activating social promotions, and to the right is a 'Microsoft Translator' tile. Below the main banner, the page is organized into three columns: 'applications' featuring 'Rutero.net' and 'EzUpData', 'data' featuring 'UNdata' (with two entries for 'Gender Info 2007' and 'Millennium Development Goals Database'), and 'announcements' listing recent updates like the 'New Self-Service Publishing Wizard' and 'New Windows Azure Marketplace Data'.



Customer-focused reliable high-volume  
serving of data and APIs

# Emerging Business Models: Summary

Models already seen:

- Cleansing and organising data
- Information services to the public
- Data mining
- Operational efficiency/optimisation
- Financial products
- Customer attraction and retention
- Data broking

# More Innovation



[register now](#)

[home](#) [pro](#) [web-map builder](#) [developer area](#)

## Welcome to the OS OpenSpace API

The OS OpenSpace API is free to access and lets developers create amazing web applications and online projects with Ordnance Survey maps.

But OS OpenSpace API is not just for developers.


Although the API uses JavaScript to make web pages more interactive, anyone can create an application by following our sample code and tutorials.

Get Ordnance Survey maps on your website to enhance the service and customer experience.


**step 1**  
get started and  
**register now**  
for your API key

**step 2**  
technical help is  
available from our  
**developer** area

**step 3**  
join our **forum**  
and share your  
thoughts



OS OPENSOURCE is a registered trade mark of Ordnance Survey.



Example of OS OpenSpace API displaying Ordnance Survey data

News and information

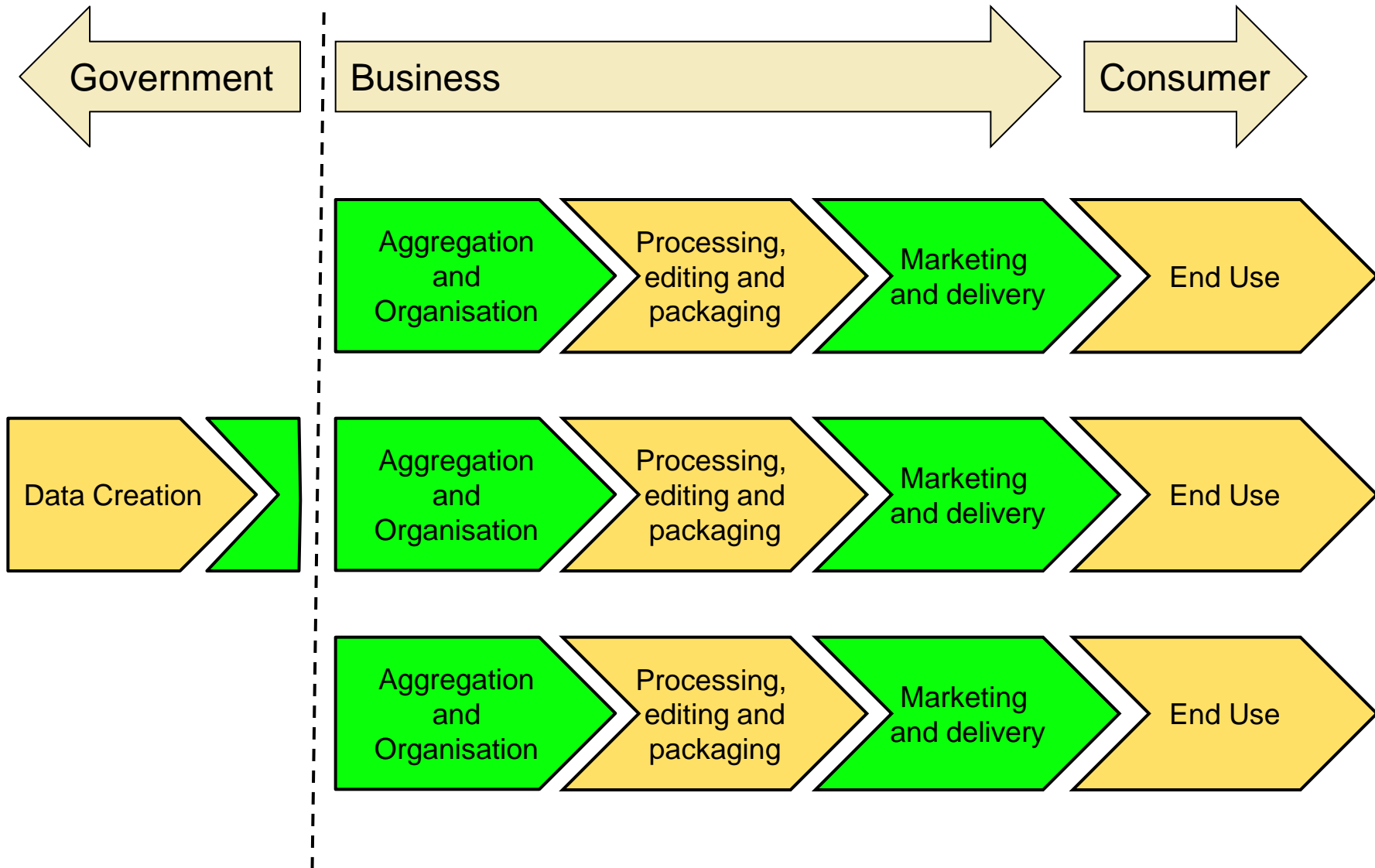
[Web-Map Builder – the login got lazy](#) NEW

Enter the [GeoVation Challenge](#).

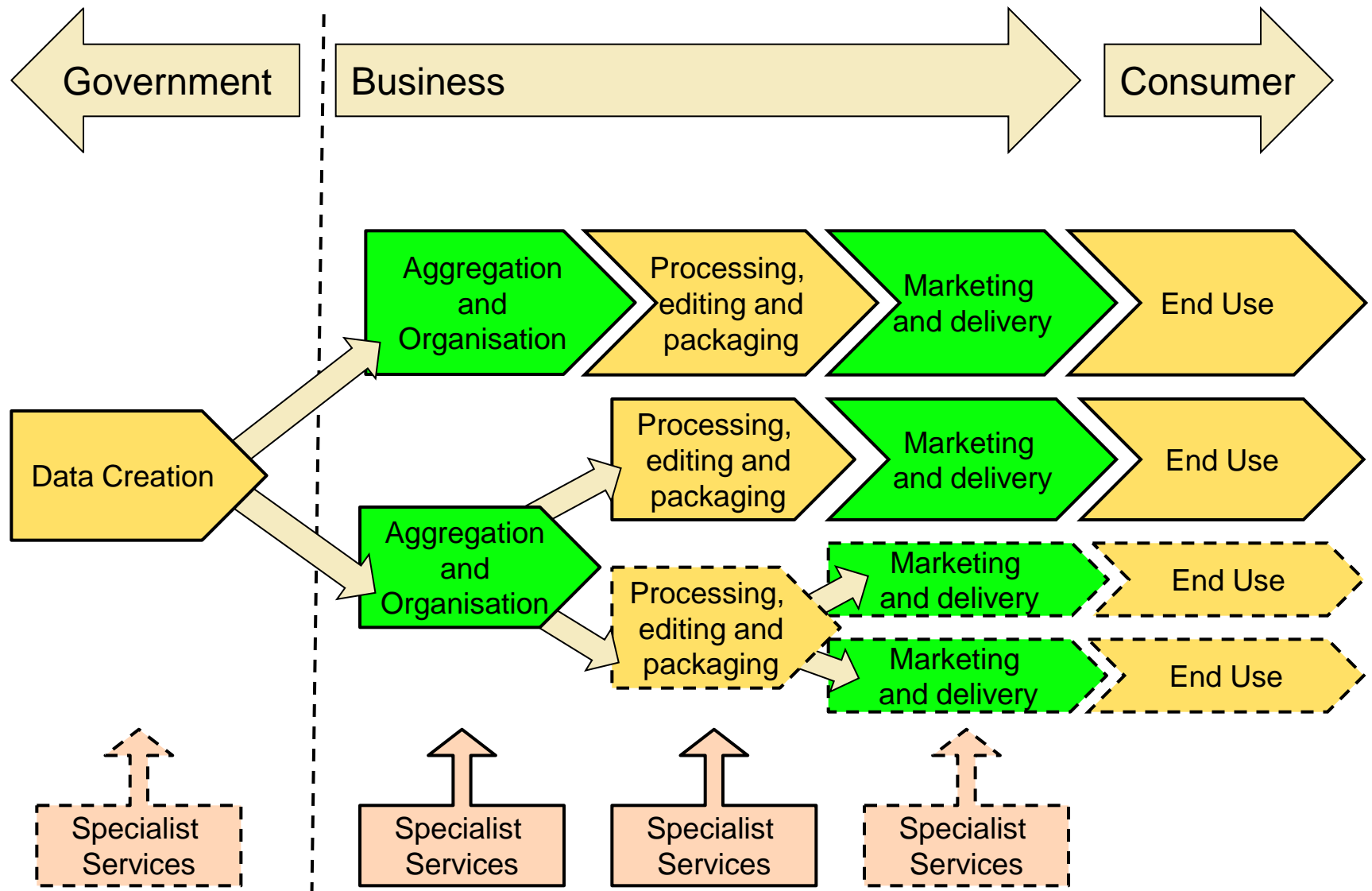
Visit the [OS OpenData website](#).

Opening up mapping data and providing a developer platform has increased innovation

# Public Data Re-Use Value Chain (first movers)



# Public Data Re-Use Value Chain (maturing)



# Ecosystem for business re-use of Public Data

- Data accessible through a single catalogue
- Predictable pricing
- Open Licensing
  - No restriction on innovation
- Common, open formats and ontologies
- Availability of skills and specialist services
  - Open Data Institute, LinkedGov, Semantic Web
- Data Broking and other dis-aggregation of value chain



## It's not just about new data

Scope for “Open Data” also includes data previously “published” but ...

- in non-reusable format
- with restricted licence
- only aimed at specialist groups
- only for payment
- only in response to requests
- difficult to find

data.gov.uk contains a lot of data which nobody knew was already published

# Charging?

## Free is the default

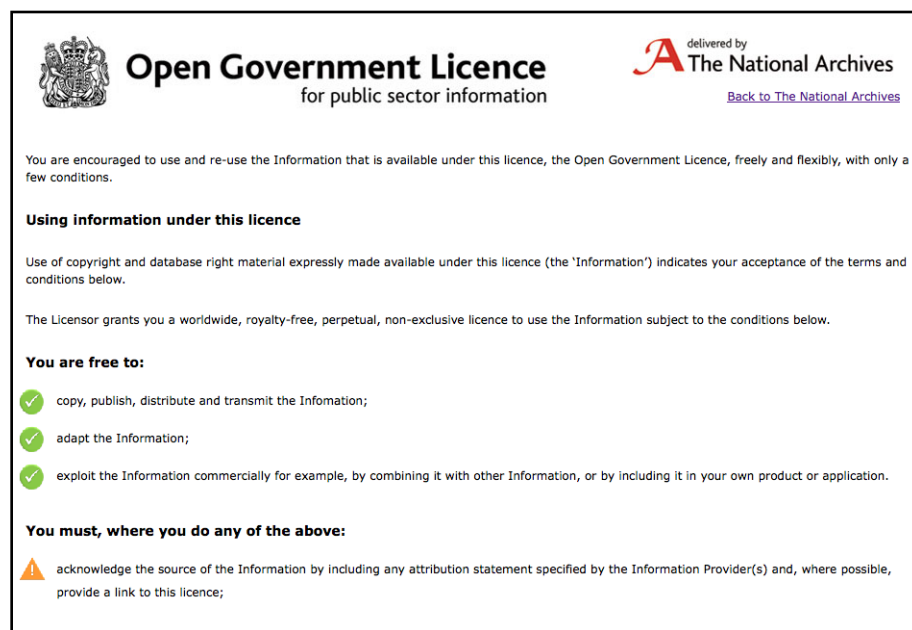
- Taxpayer has already paid for most data
- Economic gain maximised when priced at marginal cost of distribution
  - Raw data free
  - Possible small service charge for reliable API
- Sales revenue not material to most agencies
- Sales administration typically >25% of revenue

## Exception: where data collected for sale

- “Public task” data free, “value added” charged

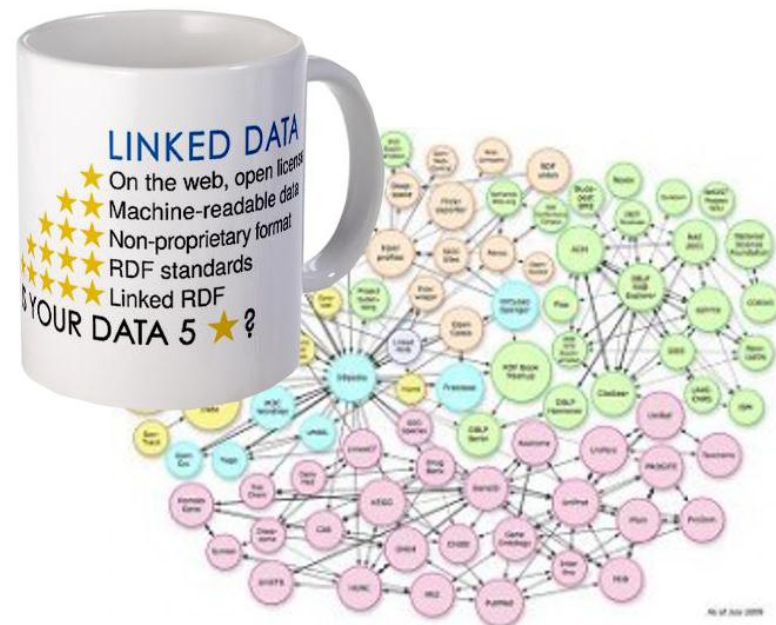
# Clear, common, licensing approach

- “Open” licence essential for unrestricted re-use
- Clarity vital, especially for businesses
- Common licensing for all Government data valuable
- UK OGL
  - free to reuse
  - with attribution
  - without misrepresentation
- CC-BY a good alternative

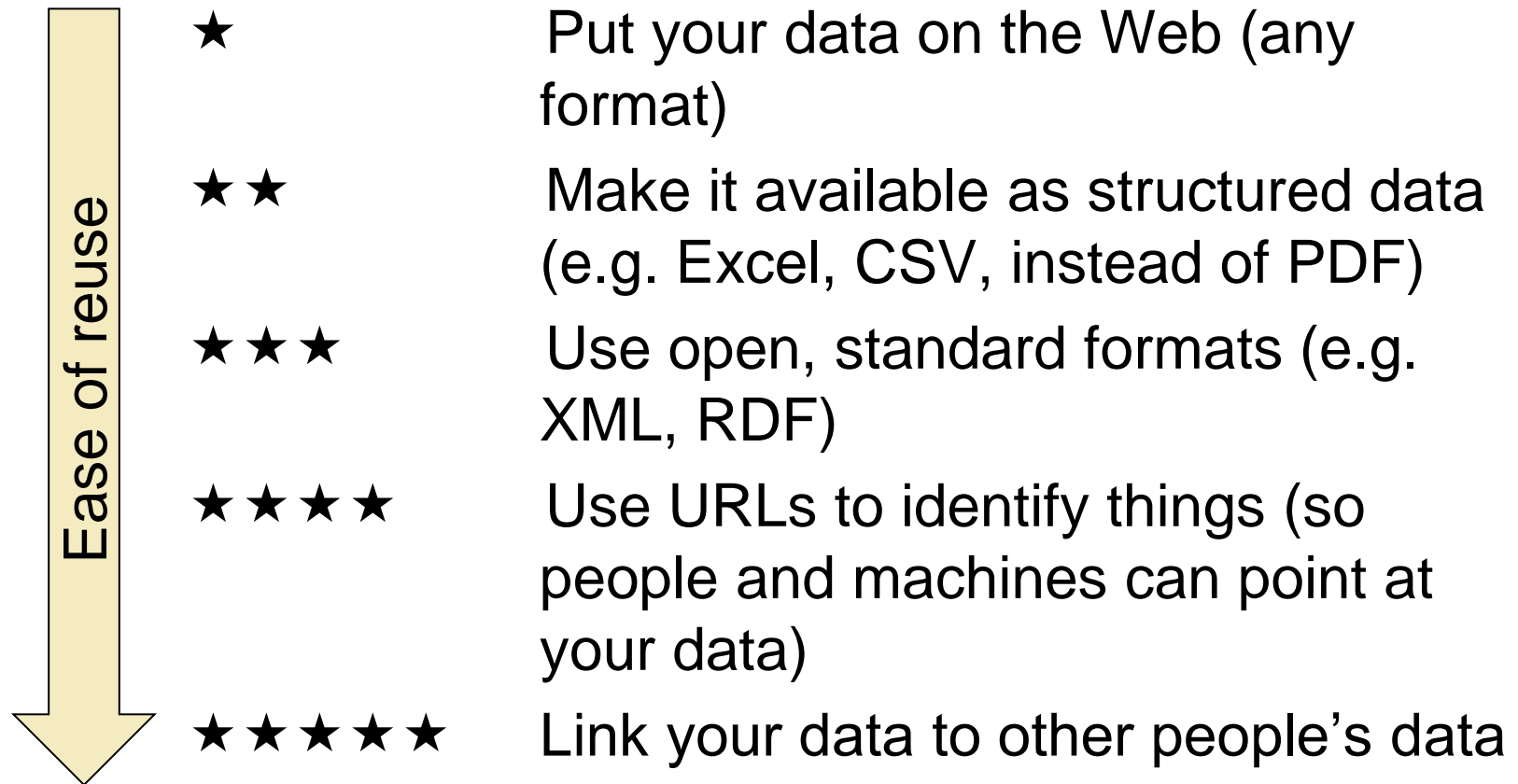


# Government: key provider of reference data

- Government Registers/Licences are key reference data for wider economy – the “National Information Infrastructure”
- To maximise economic benefit the data needs to be easily reusable
- Today that means “linked data” – the building blocks of the Semantic Web



# Data Publishing – Star Quality



# Continuously engage with developers



Photos: [@memespring](#),  
[@MadLabUK](#), [@paul clarke](#)






# .. and highlight applications, not data

**POLICE.uk** Address, postcode or place name Search


Overview Crime maps Meet the team Get involved Information and advice

### Police apps


We've made the crime data on this website available in an open and standard web-based applications (apps).



**Crime Finder**  
Imagine if you could see reported crimes that have happened in your area. Reality to give you a visual sense of crime all around you.  
Using the GPS, camera and compass on your phone, you can see a colourful key of icons.  
Available for: iPhone, iPod, iPad.  
[View this app »](#)



**Crime Map UK**  
A free iPhone and iPad app showing where crimes have happened in your area. See how your area compares to others.  
Available for: iPhone, iPod, iPad.  
[View this app »](#)



**Crimes Near Me**  
A free Android application showing crime information in your area.  
Available for: Android devices.  
[View this app »](#)

HM Government

data.gov.uk<sup>BETA</sup>

## Opening up government

Home Data Apps Ideas Forum Wiki Blogs Linked Data

### Apps



**See UK**



**BUSit London**



**Carehome Map**



**UK Post Box**



**See UK**  
SeeUK provides visualisations on data from data.gov.uk

PAUSE

# Open Data Institute: its mission

- Develop capability of UK businesses to exploit value of Open Data
- Engage developers/small businesses to build Open Data supply chains and commercial outlets
- Help public sector use its own data more effectively
- Ensure academic research in Open Data technologies

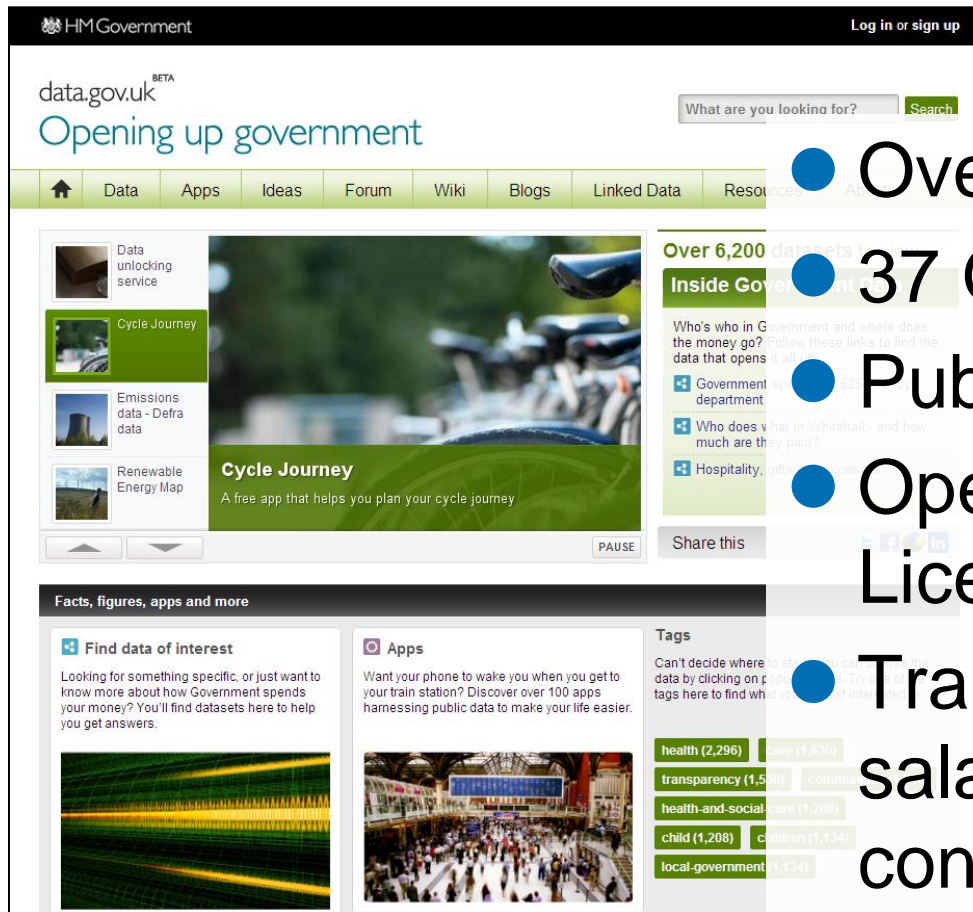


# How data.gov.uk was developed

## data.gov.uk organising principles

- Small central team (4 people)
- Short stages, each with clear goals
- Respond quickly to feedback from users
- Draw in resources from Government's experts
- Each dataset always controlled by its owner
- data.gov.uk holds metadata not data!
- It is not an IT project! Keep the IT simple
  - use Open Source (CKAN, Drupal, etc)
  - use existing contracts/infrastructure with niche firms
  - host data on existing websites or on public Cloud

# The first two years of data.gov.uk



- Over 7500 datasets
- 37 GB of geo data
- Public Data Principles
- Open Government Licence
- Transparency of salaries, spending, contracts and tenders

# Lessons learned

# Important to have top-level political support



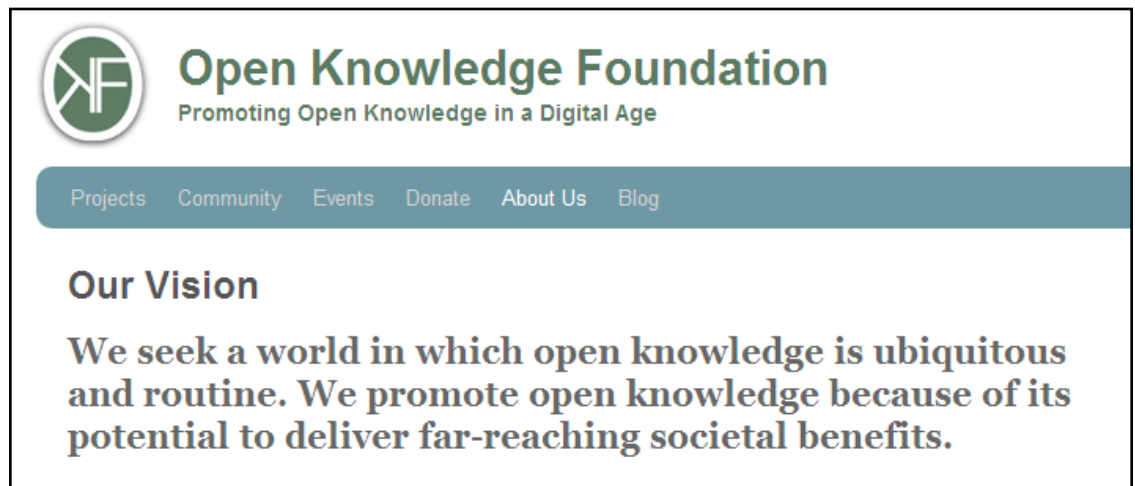
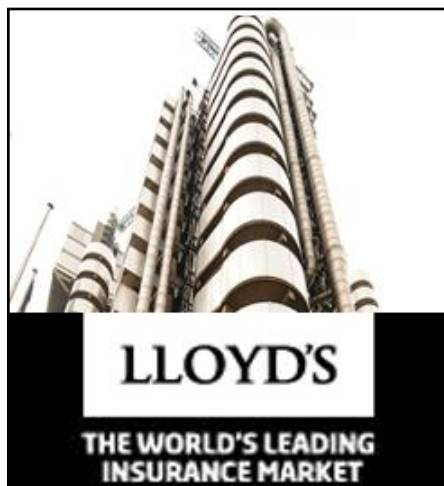
“Greater transparency across Government will enable the public to hold politicians and public bodies to account”



“Public information does not belong to Government, it belongs to the public on whose behalf government is conducted.”



# Important to have strong “demand-side”





# Also important to have passionate team!



# Refine policy principles based on experience



The screenshot shows the data.gov.uk website with the tagline 'Opening up government'. A navigation bar includes links for Home, Data, Apps, Ideas, Forum, Wiki, and Blogs. The main content area features the title 'Public Data Transparency Principles' and a sub-header 'Working definition of "Public Data"'. Below this is a paragraph defining public data. Another sub-header 'Draft Public Data Principles' is followed by a bulleted list of principles.

data.gov.uk<sup>BETA</sup>  
Opening up government

Home Data Apps Ideas Forum Wiki Blogs

## Public Data Transparency Principles

Posted on 25/06/2010 | 27 comments

### Working definition of "Public Data"

"Public Data" is the objective, factual, non-personal data on which public services run and are assessed, and on which policy decisions are based, or which is collected or generated in the course of public service delivery.

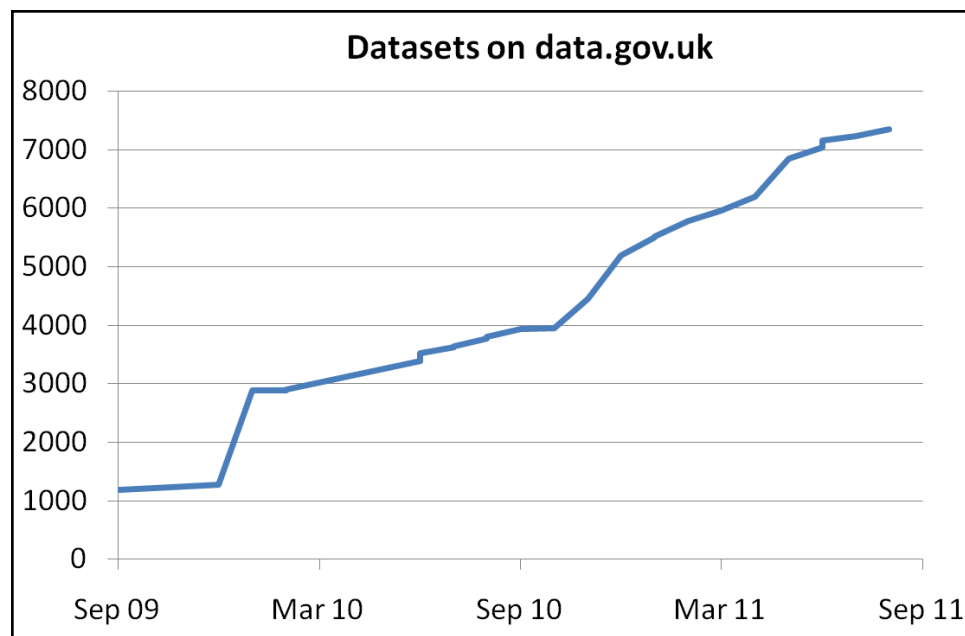
### Draft Public Data Principles

- Public data policy and practice will be clearly driven by the public and businesses who want and use the data, including what data is released when and in what form – and in addition to the legal Right To Data itself this overriding principle should apply to the implementation of all the other principles.

<http://data.gov.uk/blog/new-public-sector-transparency-board-and-public-data-transparency-principles>

# Incremental delivery

- Allows “data pipeline” to be turned into automated tools and repeatable processes
- Enables future releases to be prioritised by developer feedback
- Creates steady “news flow”
- Can postpone difficult cases



# Handling the concerns of data owners

- Releasing data is a new idea
- Look for ways to manage perceived risks
- Look for examples and precedents
- For first phase, be prepared to compromise on data content – but not on licence terms
- “Hackdays” can show potential benefits
- Ensure data owners get credit for what they do release



# Manage expectations, prepare for mistakes



“We’re making a small start next week. But eventually, it’s going to make a big difference.”

“The information we’re publishing next week won’t be perfect, it won’t always be in the most convenient format, and I’m sure there’ll be some mistakes. But I want to get on with it.”

*UK Prime Minister 29 May 2010*

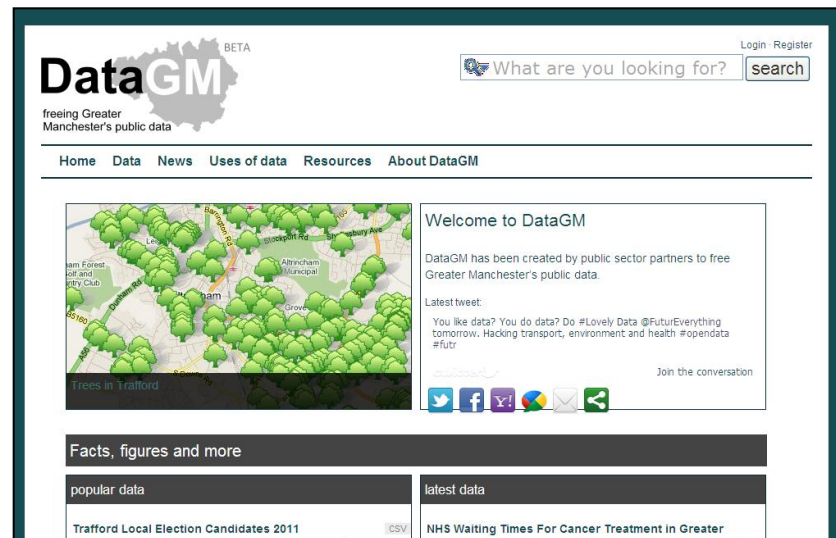
... and the biggest lesson of all

**Overcome obstacles  
practically  
by doing,  
not debating**

**Unforeseen additional benefit**

# Government is a data user too

- Once Open Data is published, other public agencies can use it too
- Each level of government can see all the data about an area from all the different levels
- Greater Manchester estimated potential savings of £8.5m a year from time saved in looking for data





**Questions?**

**End**