Opening up public data should be an urgent priority for the government and could lead to considerable economic benefits

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There is no longer a reasonable justification for keeping publicly funded data under lock and key. With the government ostensibly committed to transparency, **Chris Yiu** argues that opening up public data is a must, and could have solid economic and productive benefits.

Running a government – any government – has always involved quantities of data. For centuries almost all of this data has been closely guarded. Governments around the world have seen fit to provide access to data on a need-to-know basis and, for the most part, judged that their citizens didn't need to know.

The balance is, however, starting to shift. Advances in data storage, processing and communication technologies are having a profound impact. For the first time in human history, it is technologically feasible for every citizen to have access to every piece of data or content generated by their government. And as these same technologies drive fundamental changes in our economy and society, it is becoming clear that, with the right protections, opening up public data will deliver considerable benefits.

A right to data

Earlier this month Policy Exchange published A Right To Data. This report examines the state of the open data debate and makes three key recommendations for policymakers:

- That the government enshrine a right to public data in legislation. This should make all of the
 data collected or created to support the day-to-day business of government open; easy to
 access and free at the point of delivery, without restriction on use or reuse (viz. the Open
 Definition). We argue that open data is so strategically important that it warrants being put on
 a statutory basis guaranteeing the principle regardless of the mood of ministers and civil
 servants. We also argue that important protections for personal data, national security and
 ministerial advice should be provided.
- That responsibility for open data is elevated to board level in every public sector body. A statutory right to data will be most effective when mindsets and behaviours in the public sector are geared toward open ways of working. This is a big ask most government departments are geared for closed ways of working and in no hurry to change. Leading from the front, inspiring a culture of openness and setting the right incentives will be a far greater challenge than simply implementing the new technology required to organise and open up public data.
- That every public sector body define its public task and associated data requirements. The public sector's core role is to deliver public services. But there are many instances where public sector bodies are also engaged in commercial or "value added" data activities, blurring the line between the public task and a profit-driven, state-backed monopoly. We argue that any activity based on leveraging public data to develop commercial products or services should, ultimately, be spun out. In the long run this will help prevent crowding out and foster innovation around creative uses of public data.

The economics of open data

In the report we also set out the economic case for open public data. In recent years many debates have deadlocked in this area. Governments see a clear and immediate cost from giving up the (small) amounts of money they make reselling public data. Set against this are uncertain estimates of diffuse potential benefits – necessarily counterfactual in nature and with a wide margin of for error.

We take the analysis back to first principles, and argue that data has two important and unusual characteristics. First, public data typically involves high fixed costs – so high, in fact, that it would not normally make sense for multiple bodies to collect or create the same data. Second, digital data can typically be duplicated at very low cost – so low, in fact, that in many cases zero is a good approximation for the marginal cost of data provision.

This cost structure implies that public data provision is a natural monopoly. From a narrow data owner perspective, there is an opportunity to extract rents by setting a profit-maximising price for data access. But from a public policy perspective this outcome is dominated by setting price equal to marginal cost. To cover the fixed costs of data collection this strategy requires a call on the Exchequer (and / or a minimally distortive charge on data users using a Ramsey pricing tool).

In practice we find that the direct cost to the Exchequer of giving away key datasets like maps and postcode data may be far lower than sometimes thought – perhaps in the region of £50 million a year in terms of lost commercial fees and charges. For key data organisations like the Ordnance Survey and Met Office the largest customers by far are actually other parts of government – so for the most part a wash in public finance terms.

The potential benefits of open public data are notoriously difficult to quantify, but are likely to be orders of magnitude greater (with estimates for the UK into the £ billions per annum based on increased output, employment and public sector efficiency).

We also argue that public sector bodies need to get clear on their public task, focus more aggressively on core public service delivery and cease data activities that fall outside this remit. Mixing public task and commercial activities distorts price signals and introduces perverse incentives. Worse still, maintaining state owned monopolies in the markets for products and services built on top of public data crowds out private sector activity and innovation.

The future of open data

In our view there is no longer any reasonable justification for keeping publicly funded data under lock and key. The government has described transparency as a defining characteristic of its future policy, and we hope to see further open data announcements during the course of the year. In the words of the minister for the cabinet office: I have no doubt that, as we become increasingly data rich, we will all look back and wonder how we ever tolerated such collective ignorance.

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Note: This article gives the views of the author, and not the position of the British Politics and Policy blog, nor of the London School of Economics.

About the author

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