## Opening up government

BY MARK PEPLOW

States are pouring information about budgets and public services onto the web - but efforts to measure the true impact of open data are only just beginning.

**Knowledge is power, open knowledge is empowerment,**" says Rufus Pollock, co-founder and director of the Open Knowledge Foundation. Pollock's visionary zeal has put him at the vanguard of a worldwide campaign to liberate the vast stores of useful information held by governments and other organizations. The effort is working: detailed budget data, crime statistics and school performance indicators that were once locked in dusty civil service filing cabinets are now being set free on the worldwide web.

The British organization's ultimate goal is to make governments more transparent and accountable to citizens, says Pollock. But there are other spin-off benefits. Ready access to spending information can help governments function more effectively, while data about local services can enable people to make informed choices about their lives, such as where to buy a house or educate their children. Openness can even turn a profit: technology companies are already mashing up open data into commercial apps that plot the quickest route through busy cities or track carbon emissions.

Founded in 2004, the OKF drew inspiration from opensource software developers creating programs that were free to use and adapt. By 2009 it was working with the British government to create "Where Does My Money Go?," a website that laid bare the complexities of the nation's budget using simple visualization tools. Two years later that site linked up with similar ones in other countries to become Open Spending, the world's largest single database of government transactions. Now the foundation itself is going global. In June 2013 it partnered with like-minded organizations to create a new international group, the Global Open Data Initiative. GODI aims to show governments why they should become more open, and sets standards about how they should release data – as machine-readable files rather than scanned documents, for example.

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Some governments are enthusiastically embracing the open vision. In 2011, eight nations formed the Open Government Partnership, a support network that offers practical advice on making data available to citizens. The partnership now includes more than 60 countries. "It's a sign of how mature and successful open data in government has become," says Pollock.

In 2012 the G8 nations signed the Open Data Charter, pledging that open, accessible and useful data would become their governments' default information currency. "Open data has really broken through to the mainstream," says Tim Davies, research coordinator at the Open Data Research Network.

Davis authored the first Open Data Barometer report last year, which assessed progress in the area. It concluded that the UK leads the world, followed by the U.S., Sweden and New Zealand. The U.K. topped the poll because it has a clear policy framework on openness backed by high-level political leadership, a strong history of advocacy from organizations such as the OKF and a well-developed IT industry to make best use of the data, explains Davies.

In Switzerland progress has been slower, says Hannes Gassert, co-founder of the OKF's Swiss chapter. "The notion of open data was completely unknown here two years ago," he says. The country's federal data portal, launched in September 2013, still contains few useful datasets, and the barometer report ranks Switzerland 22nd, just behind Russia.

One common objection to greater openness is the possibility that personal details could be extracted from large data sets, says Gassert. Others worry that the data will simply empower the already empowered. Information about land ownership, for example, is more likely to be used by speculators trying to accumulate large property portfolios than by local communities trying to protect their land rights.

Pollock is quick to point out that simply freeing government data is not enough to stop corruption. "Data is not a magic potion," he says, but it can be an important ingredient in community activism. Yet most people don't have the time, inclination or skills to dig into the data. One of the foundation's next priorities is its School of Data, to help enthusiasts wrangle data sets in ways that will have trickle-down benefits.

The foundation also wants to help companies be more transparent. Stores could use open-data tools to show customers that they are not sourcing their clothing from Bangladeshi sweatshops, for example.

GODI still has plenty more work to do with governments, Pollock adds. Signing up to an open-data pledge may burnish a government's international reputation, but it is no guarantee of transparency. The barometer report found that fewer than 7% of the datasets it surveyed were both open and machine-readable, making it difficult for people to analyze the data effectively.

Nor does open data come for free. In 2012, a UK Audit Office report reckoned that openness cost each government department between £53,000 and £500,000 per year, while the government's main data portal – data.gov.uk, which contains more than 12,000 datasets – has annual running costs of about £2 million.

The Open Data Research Network is beginning to quantify the benefits of that investment, but it is not an easy task. "You don't know what people will do with the data until they get it," says Davies. For now, openness still requires governments and companies to take a leap of faith.



London as analyzed by Illustreet.co.uk. In red, low-income zones; in green, higher-income areas.

## PUTTING OPEN DATA TO WORK

The UK is in the forefront of the open-data movement. Five examples:

Development Tracker: Government website reveals how the UK's international development budget is spent. aidtracker.dfid.gov.uk

## Illustreets:

Find the best place to live, based on house price, school quality, health care provision ... and even residents' educational qualifications. www.illustreets.co.uk The Cuts Map: Using open data, the Guardian newspaper maps how government spending cuts affect different parts of England. is.gd/CutsMaps

They Work For You: Keeps a watchful eye on Members of Parliament, collating their voting record, financial interests and much more. www.theyworkforyou.com

Police.uk: Compiles detailed crime statistics for your local area. www.police.uk