

»» Open data: Free access to data has social benefits

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The term "open data" refers to efforts to make certain types of data (mainly data collected or compiled by the public sector as part of research, planning or administrative tasks) anonymously and unrestrictedly available to the public. Such data may include, for example, population and census data, geographical data (maps of roads, buildings, borders and topographies), weather and transport data (timetables, transport networks or traffic data in real time), as well as budget data of the public sector (expenditures and revenues). In some cases it may also include sensitive information such as data on sales volume, income and taxation. The disclosure of public sector data, documents and administrative processes is often referred to as "open government".

Open data is closely related to open source, open content and open access, i.e. initiatives supporting unlimited access to and the unrestricted dissemination of source codes for software, media contents and scientific literature. The public provision of such data increases its social benefits by making public administration more transparent and improving the services offered by the private sector.

Boosting transparency and efficiency in public administration

Many developing and emerging economies are characterised by their public administration's lack of transparency and limited democratic control citizens have over their governments. This can promote corruption and inefficiency in administrations. Public provision of data on which administrative decisions are based make it easier for the public to monitor the efficiency and

appropriateness of administrative actions, and thus to improve governance - at least to the extent that a free press and an independent judiciary system can be used to reveal shortfalls and demand adjustments.

In Brazil, for example, all federal public expenditures can now be tracked via a transparency portal. The website has an average of 900,000 visitors per month and has proven an effective weapon in the fight against corruption. In Uruguay a website compares the services offered by public healthcare providers using various indicators like, for example, the range of medical services or waiting times. It aims at promoting transparency, competition and improving the efficiency and quality of state healthcare services.

Citizens benefit from a greater diversity in private sector services

In the public sector data is usually collected to fulfil certain public sector tasks (e.g. registration, tax administration, planning of infrastructure etc.). The same data, however, can also be used for many other socially meaningful purposes. Since data collection is usually financed through tax revenues, supporters of an "open data" movement claim that such data should also be made available as a public good (i.e. free of charge and on an unlimited basis).

A great deal of innovation, growth and employment potential can be tapped via the free private use of data. For the time being examples are found primarily in industrialised economies, but this phenomenon may turn out to be of similar economic importance in many developing and emerging economies.

In the US, for example, the National Oceanic and Atmospheric Administration (NOAA), a public authority, offers unrestricted access to weather and climate data, as well as to satellite pictures, which are used by the finance sector (weather derivatives, climate insurances), by private weather service providers for local forecasts (smartphone apps, TV formats) and for directing international shipping traffic. In the Caribbean NOAA data are used to forecast agricultural production and to estimate the potential threat of pest infestation.

Open data requirements and limits

The key requirements of publicly provided data are:

- their machine readability (to enable the processing of larger quantities of data)
- ensuring the quality of data and their anonymity (i.e. that no inferences to individuals can be made)

The open data concept reaches its limits with information that affects security-relevant and other higher national interests or violates privacy protection. ■