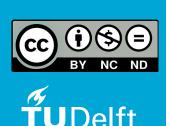
Towards an sustainable open data ecosystem

Dr. Bastiaan van Loenen

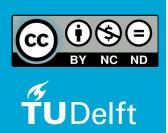
b.vanloenen@tudelft.nl

http://www.kcopendata.eu

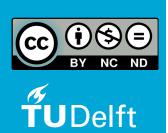




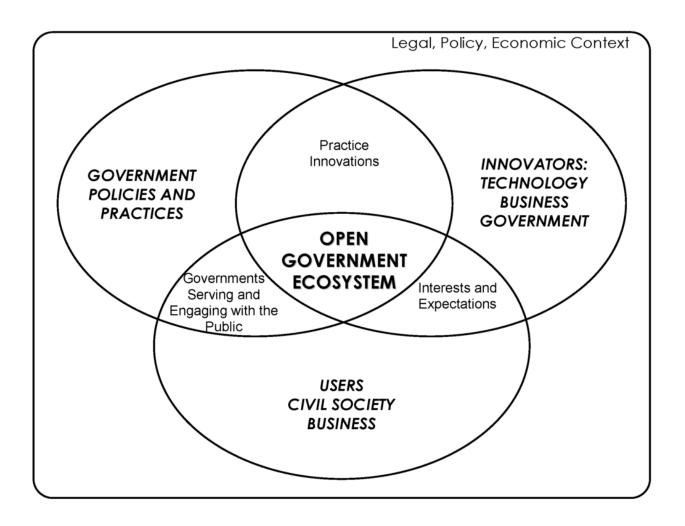
Open data ecosystem



Ecosystem



Open government data ecosystem

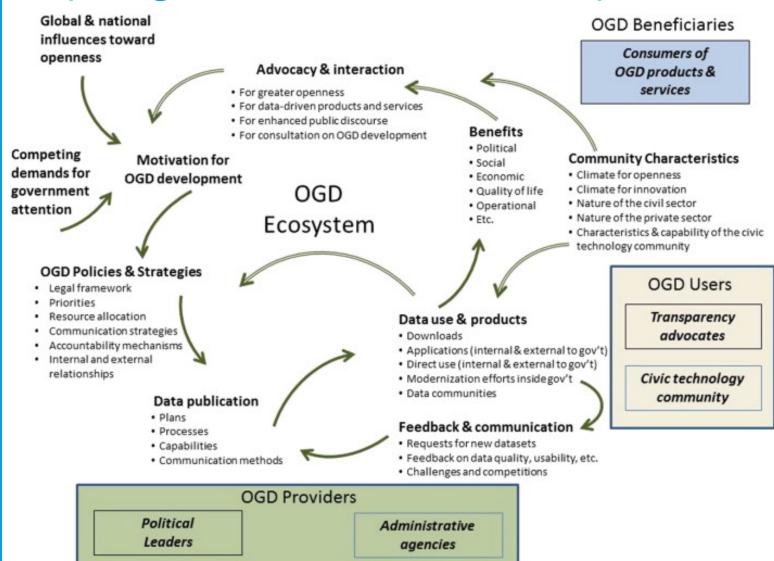






Source: Harrison, T. M., Pardo, T. A., & Cook, M. (2012). Creating Open Government Ecosystems: A Research and Development Agenda *Future Internet*, *4*(4), 900-928. doi:http://dx.doi.org/10.3390/fi4040900

Open government data ecosystem







Open Data Ecosystem

- Cyclical
- Demand-driven
- Mutually dependent agents
- Sustainable

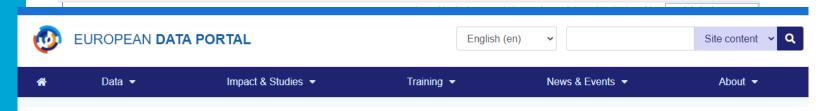


See: Heimstädt, M., Saunderson, F., & Heath, T. (2014). From Toddler to Teen: Growth of an Open Data Ecosystem A Longitudinal Analysis of Open Data Developments in the UK. *JeDEM - Journal of eDemocracy & Open Government*, 6(2), 123-135.

Towards a circular open data ecosystem



A circular ecosystem



Open Data and the Circular Economy



Open data insights can improve decision-making regarding food production, use of resources and reducing pollution

The European Union has made the decision to move away from the traditional economic model (take-make-consume-waste), which thrived during the industrial revolution, to the circular economic model of in 2015. The circular economic model is based on the reuse of resources (e.g. products, materials), the regeneration of natural systems and to reduce waste and pollution. In other words, the circular process of the natural living world is adopted in the economy to reduce the negative impact on the environment and the health of all living organisms. The model can be divided in the biological cycle (e.g. designing of compostable packaging) and the technological cycle (e.g. reuse of phone parts). Thereby, the circular economy is dependent on cultural change. For example, subscriptions to services or products (e.g. ridesharing) are better adjusted to the circular economy than the traditional ownership of services or products (e.g. ownership of a car).

The Circular Economy in Europe

The European Commission has adopted a New Circular Economy Action Plan &, which is one of the main corner stones of the European Green Deal &, as of 11th March 2020. Open data can provide solutions to achieve the goals of the new strategy by improving decision-making based on data insights.

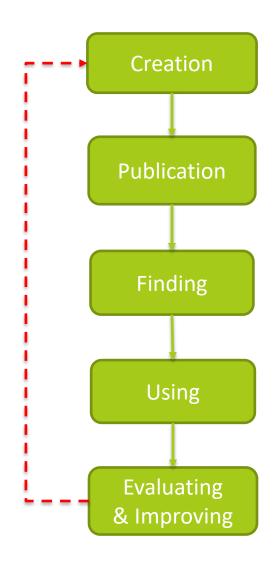
Building on the initial plans of 2015, the new strategy focuses on the design and production for a circular economy, with the aim to ensure that the resources used are kept in the EU economy for as long as possible.

Make sustainable products the norm in the EU;





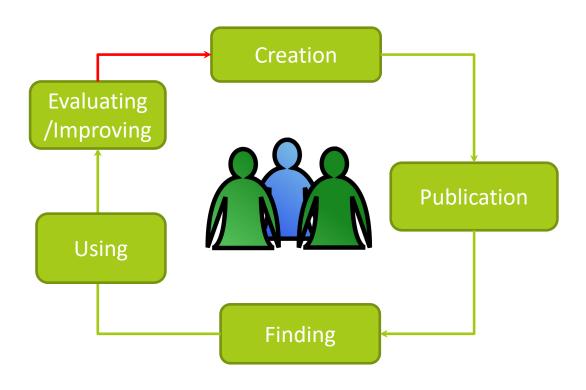
Current situation: linear process

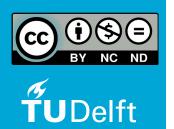






From linear to circular

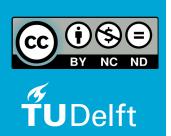




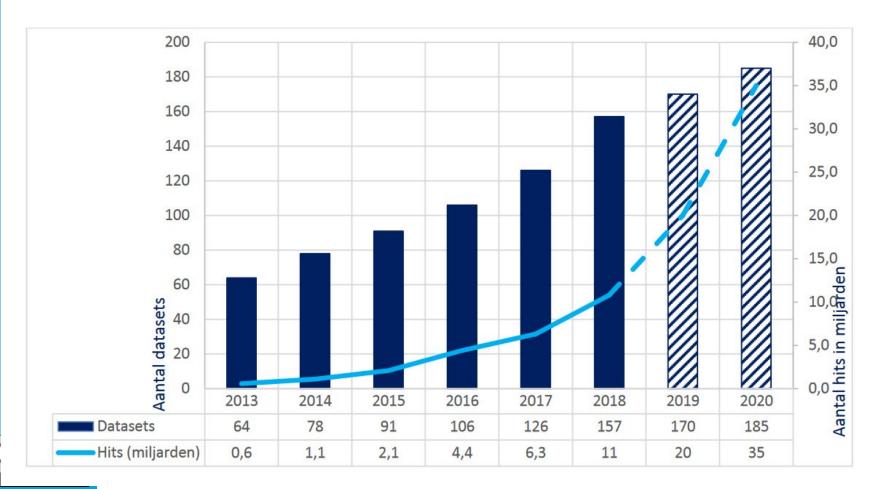
Towards a user driven open data ecosystem



Current situation: supplier driven



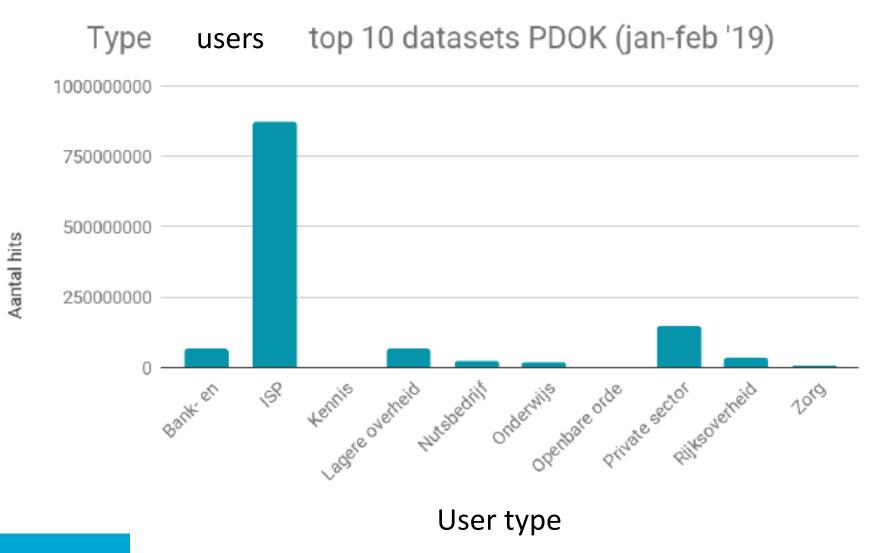
Status of open data in the Netherlands: domain GEO





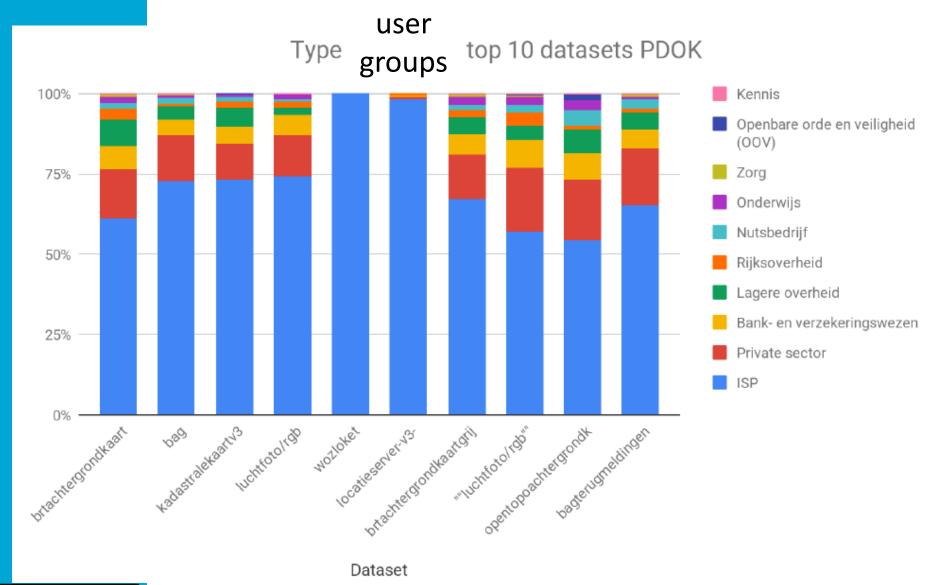


Source: https://www.pdok.nl/rapportages





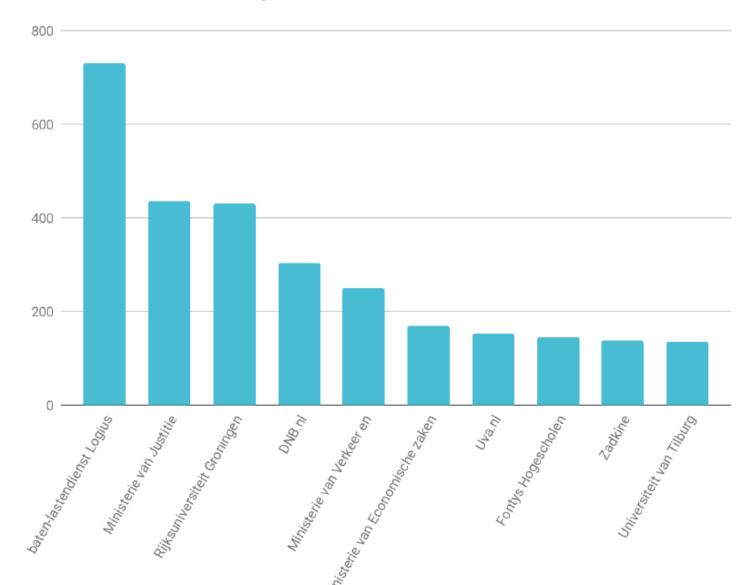
Source: Welle Donker et al. 2019





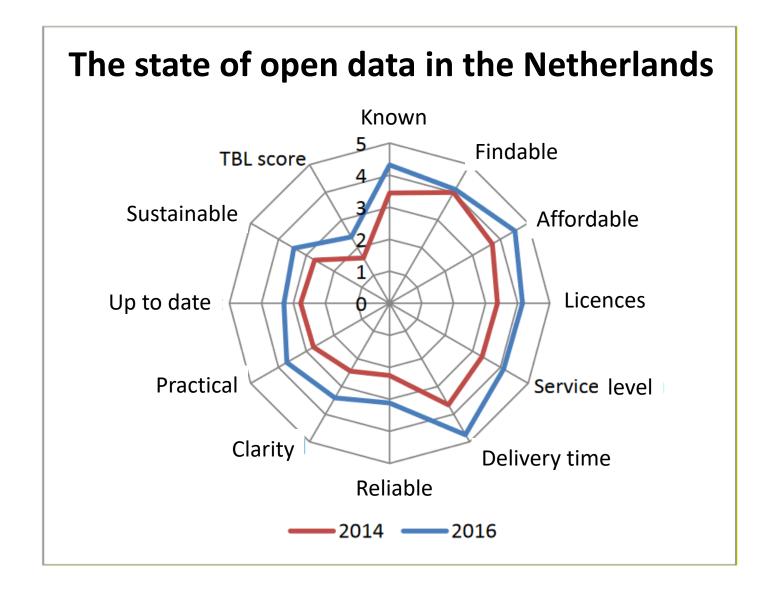
Source: Welle Donker et al. 2019







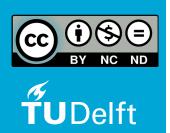
Source: Welle Donker et al. 2019







But there is no thé user...



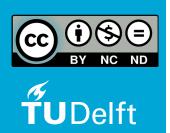
Towards an inclusive open data ecosystem



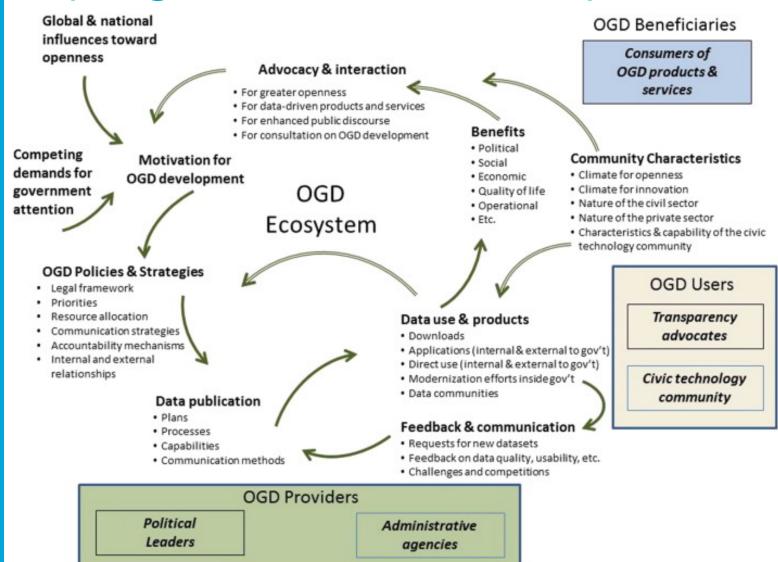
Current open data ecosystem

Exclusive:

- open government data only
- 2. government (data provider) driven



Open government data ecosystem

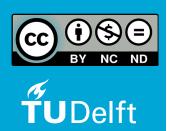




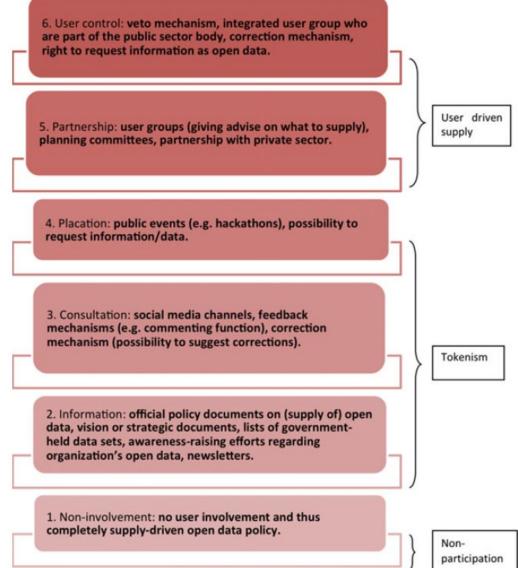


Towards an inclusive OD ecosystem

Involve NGD (users)



Inclusive: users should participate





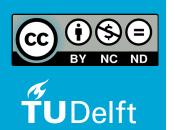
Source: Olausson, 2016

Towards an inclusive OD ecosystem

Involve NGD (users)

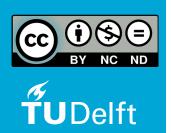
 Open the OD infrastructure to non government open data (NGD) (providers) and/or vice versa

 European strategy for data: a single European data space



A sustainable open data ecosystem is

- User driven
- Circular
- Inclusive



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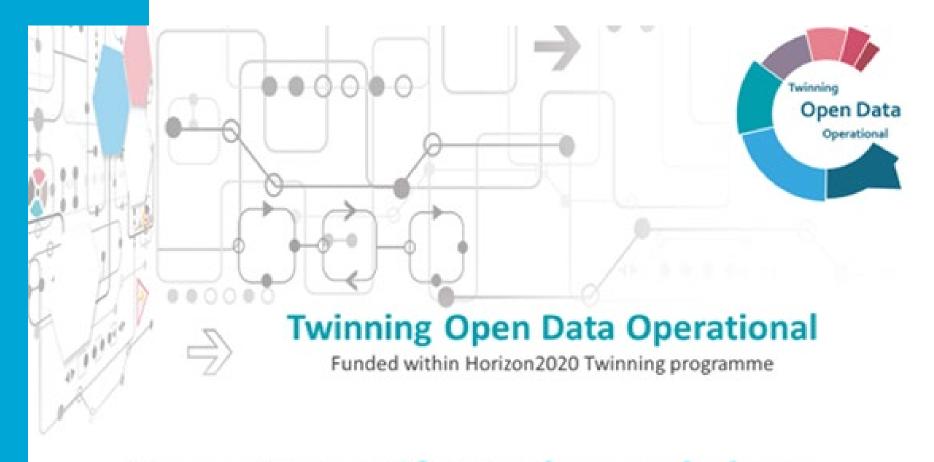
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https://www.researchgate.net/profile/Todo_Project



Open Data Life Cycle workshop

October 30, 2020





Register at:

https://www.cognitoforms.com/TODOWorkshop/TODOOpenDataLifeCycleWorkshop

Towards an sustainable open data ecosystem

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