

Data Society – the Impact of Data Sharing on Our Everyday Life

*1st Swiss Workshop on Data Science
ZHAW School of Engineering, Winterthur
21 March 2014*

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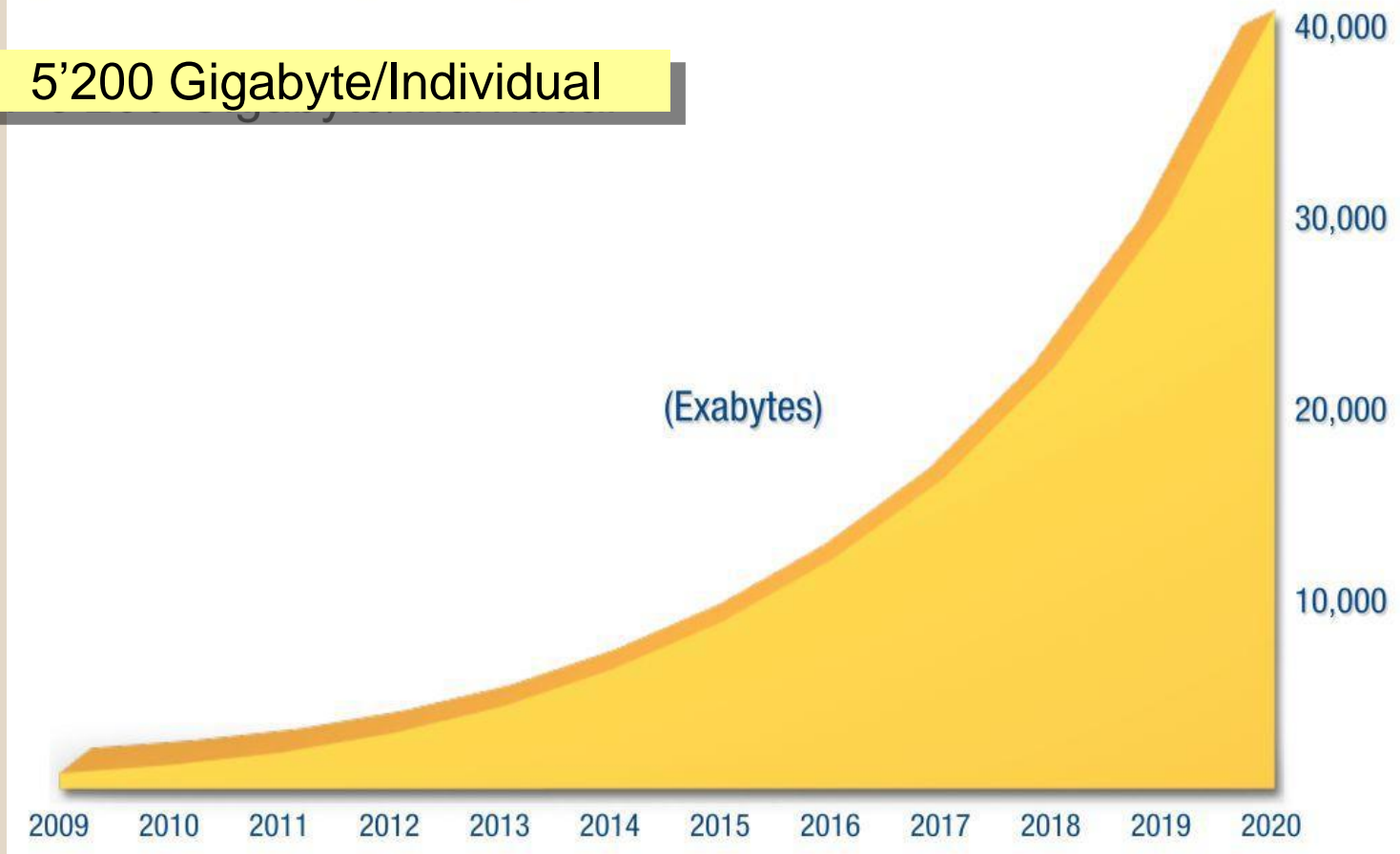
Agenda

- The Exploding Digital Universe
- Big Data – Big Business – Big Brother... ?
- Empowering Citizens: Open Data!
- Enabling Individuals to Manage Their Data: My Data!
- Proposal for a Digital Bill of Rights

The Digital Universe to the End of 2020

The Digital Universe: 50-fold Growth from the Beginning of 2010 to the End of 2020

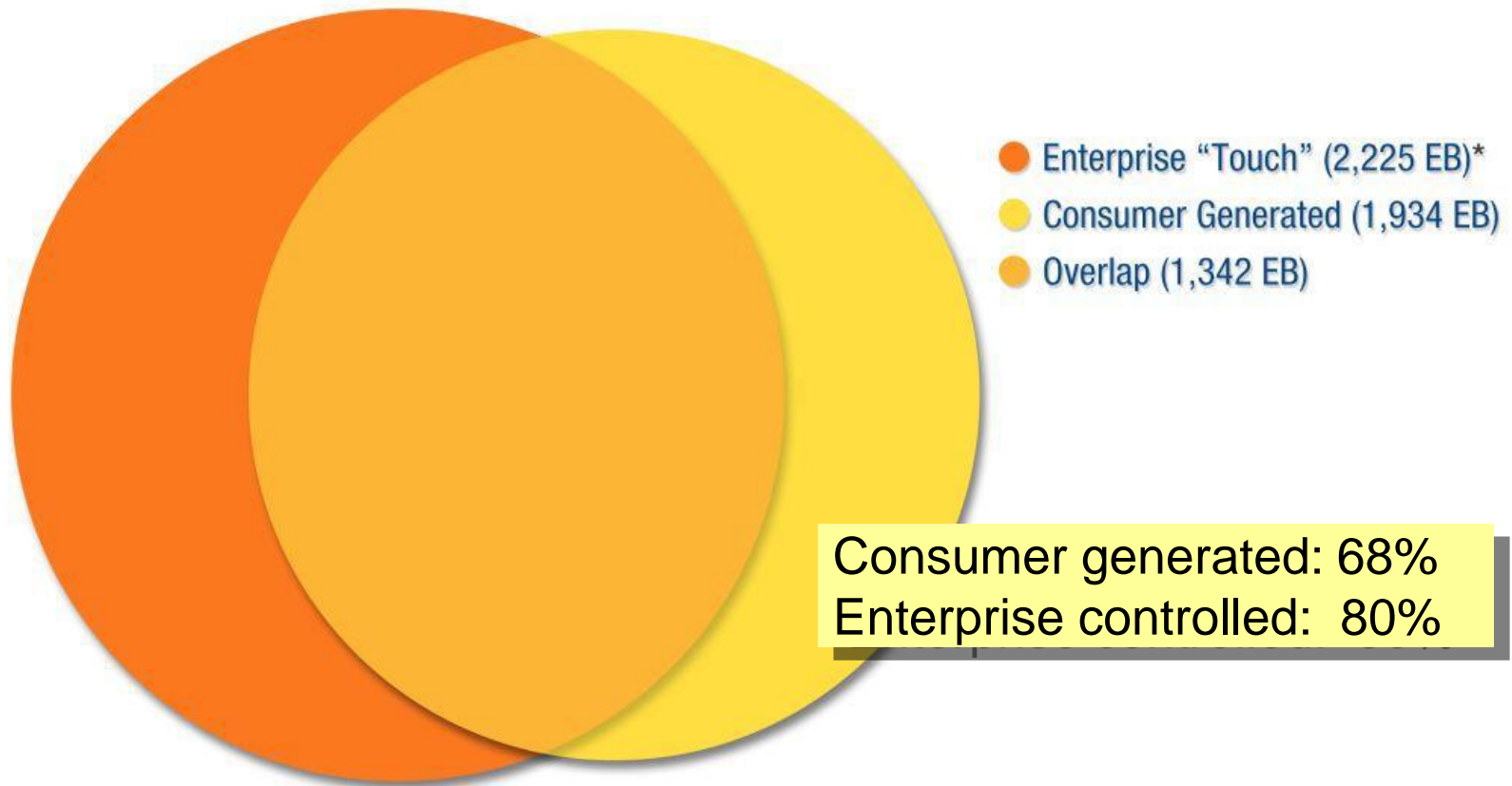
2020: 5'200 Gigabyte/Individual



Source: IDC's Digital Universe Study, sponsored by EMC, December 2012

Who owns the data?

The Impact of Consumers (2012)



* Enterprise has some liability or responsibility

Source: IDC's Digital Universe Study, sponsored by EMC, December 2012

Big Data...

- Bit 1 | 0
- Byte 8 Bits
- Kilobyte (KB) = 1'000 Bytes
- Megabyte (MB) = 1'000 KB = 1'000'000 Bytes
- Gigabyte (GB) = 1'000 MB = 1'000'000'000 Bytes
- Terabyte (TB) = 1'000 GB = 1'000'000'000'000 Bytes
- Petabyte (PB) = 1'000 TB = 1'000'000'000'000'000 Bytes
- Exabyte (EB) = 1'000 PB = 1'000'000'000'000'000'000 Bytes
- Zetabyte (ZB) = 1'000 EB = 1'000'000'000'000'000'000'000'000 Bytes
- Yotabyte (YB) = 1'000 ZB = 10^{24} Bytes
- ...

• **1 Googol* = 10^{100}**

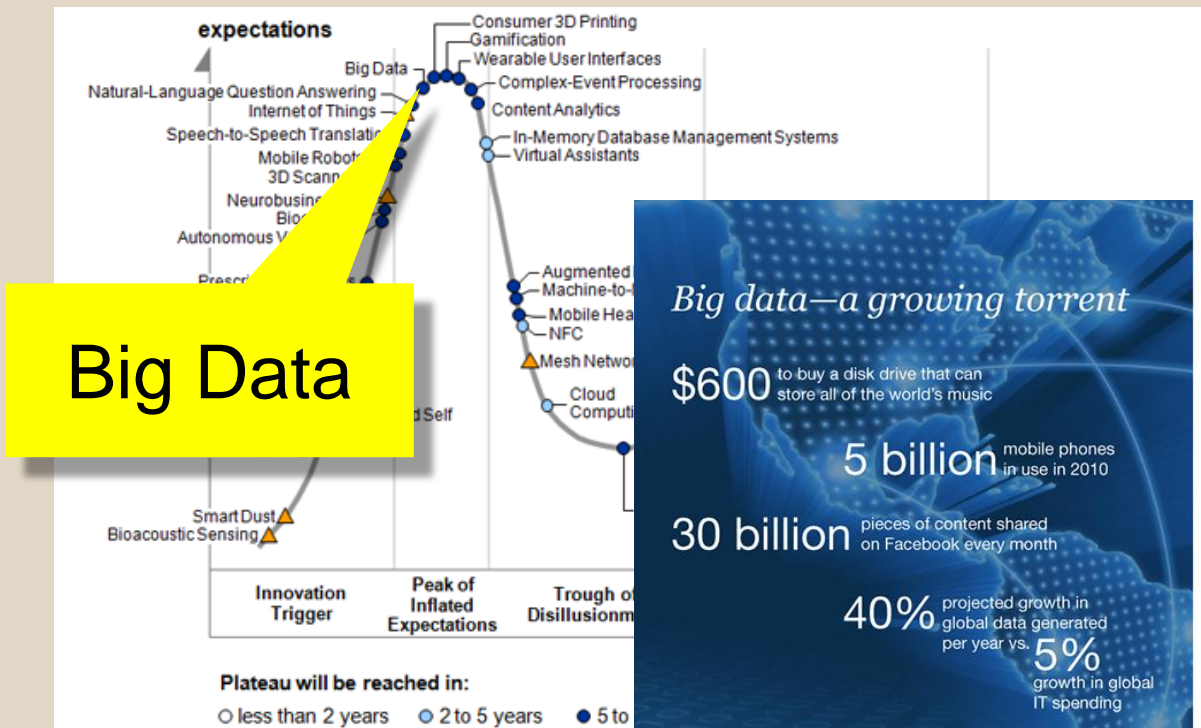
*) The term was coined in 1938^[1] by 9-year-old Milton Sirota, nephew of American mathematician [Edward Kasner](http://en.wikipedia.org/wiki/Edward_Kasner) (see <http://en.wikipedia.org/wiki/Googol>)



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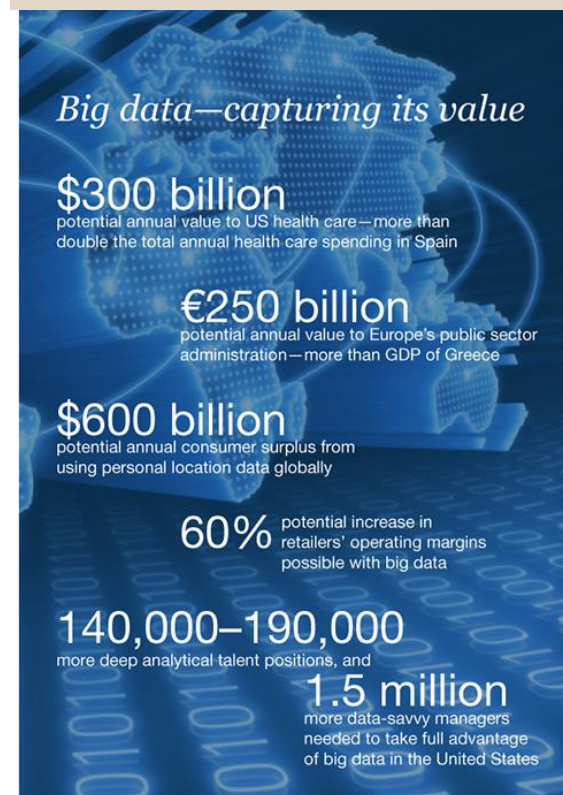
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Big Data – Big Expectations...



Big Data

Source: Gartner's 2013 Hype Cycle for Emerging Technologies Maps Out Evolving Relationship Between Humans and Machines



Source: Report| McKinsey Global Institute: Big data: The next frontier for innovation, competition, and productivity, March 2011



Big Data – Big Marketing...





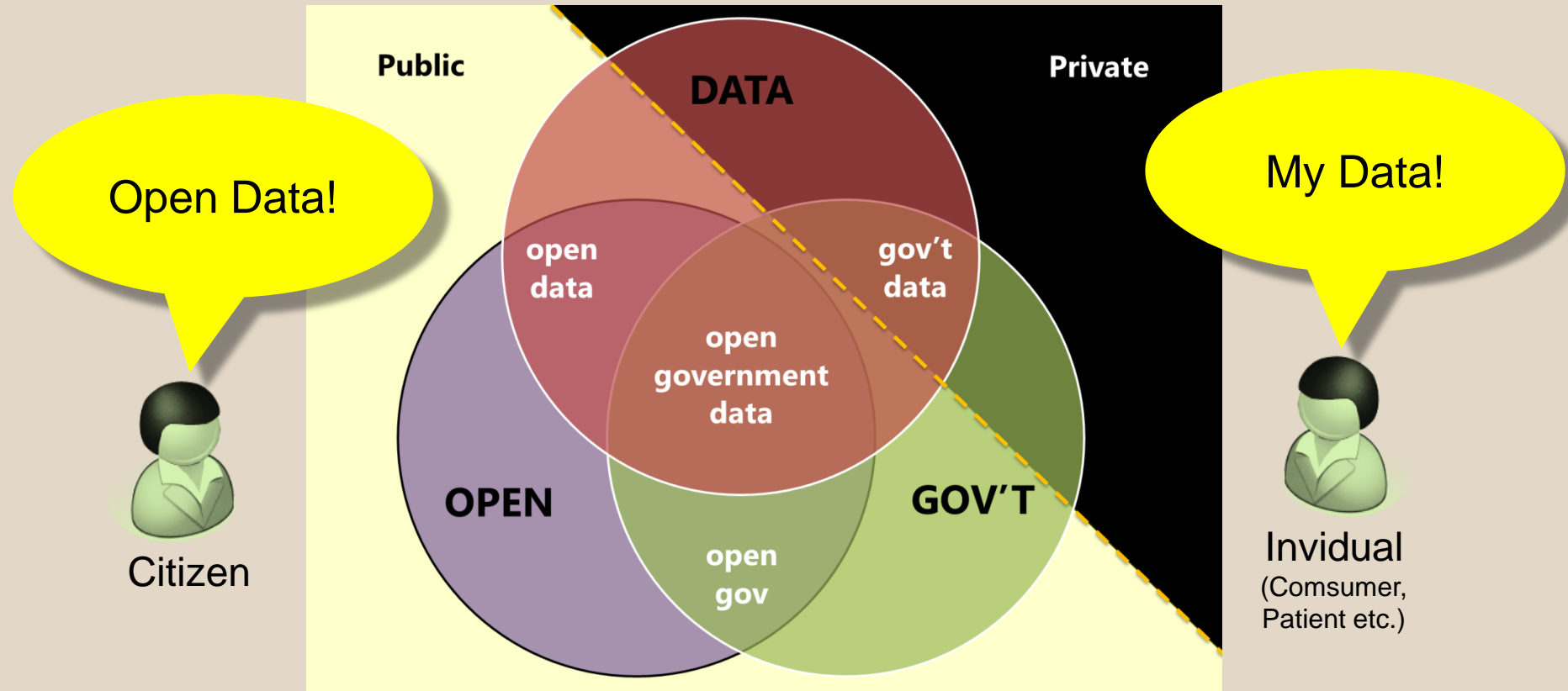
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Big Data – Big Brother: The Power of the Dark Side



Public or Private – Our Data!



Empowering Citizens: Open Data!



«Open Knowledge to empower citizens
and enable fair, sustainable societies»
Open Knowledge Foundation



OPEN DATA



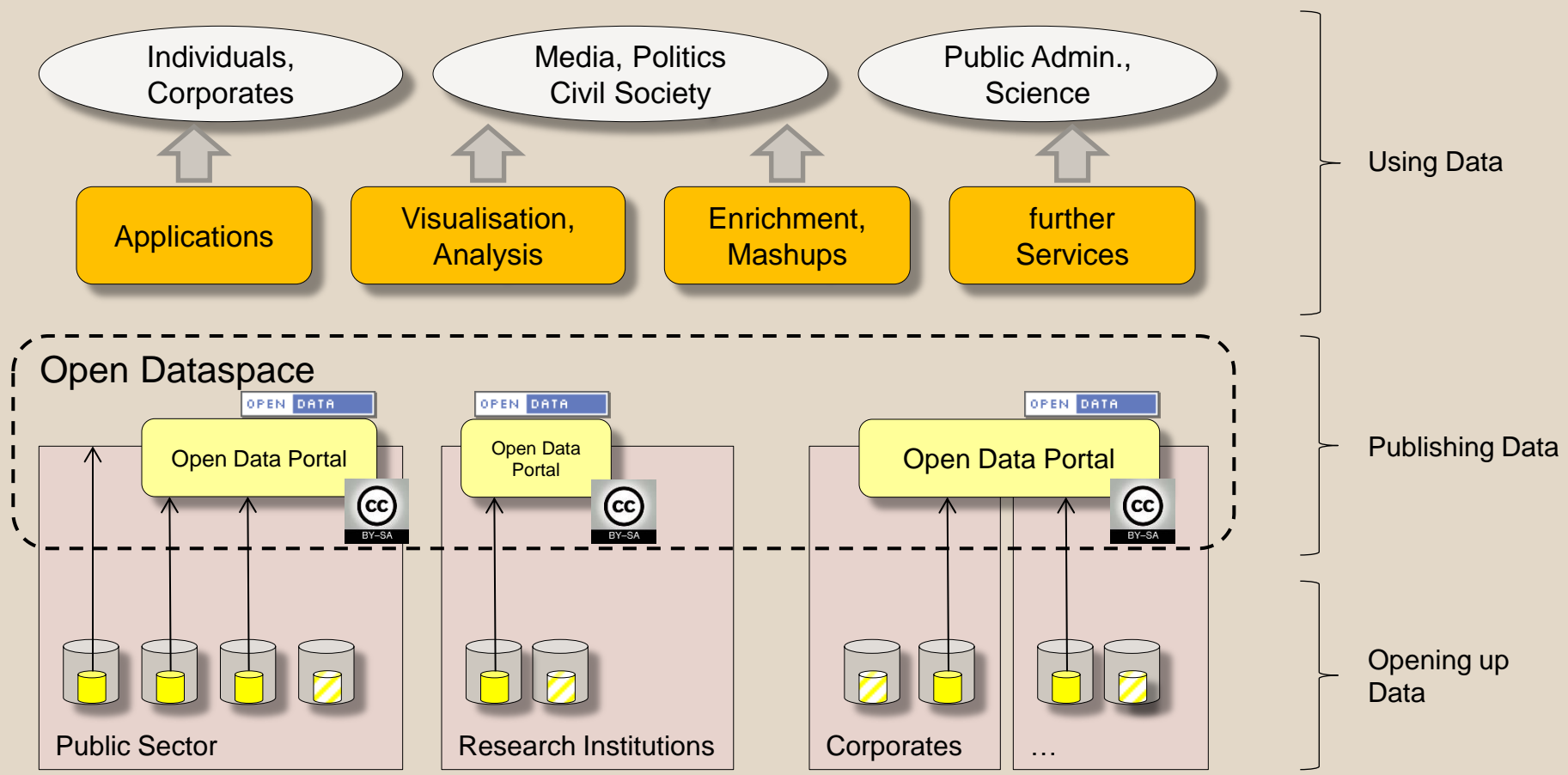
Open Knowledge
Foundation



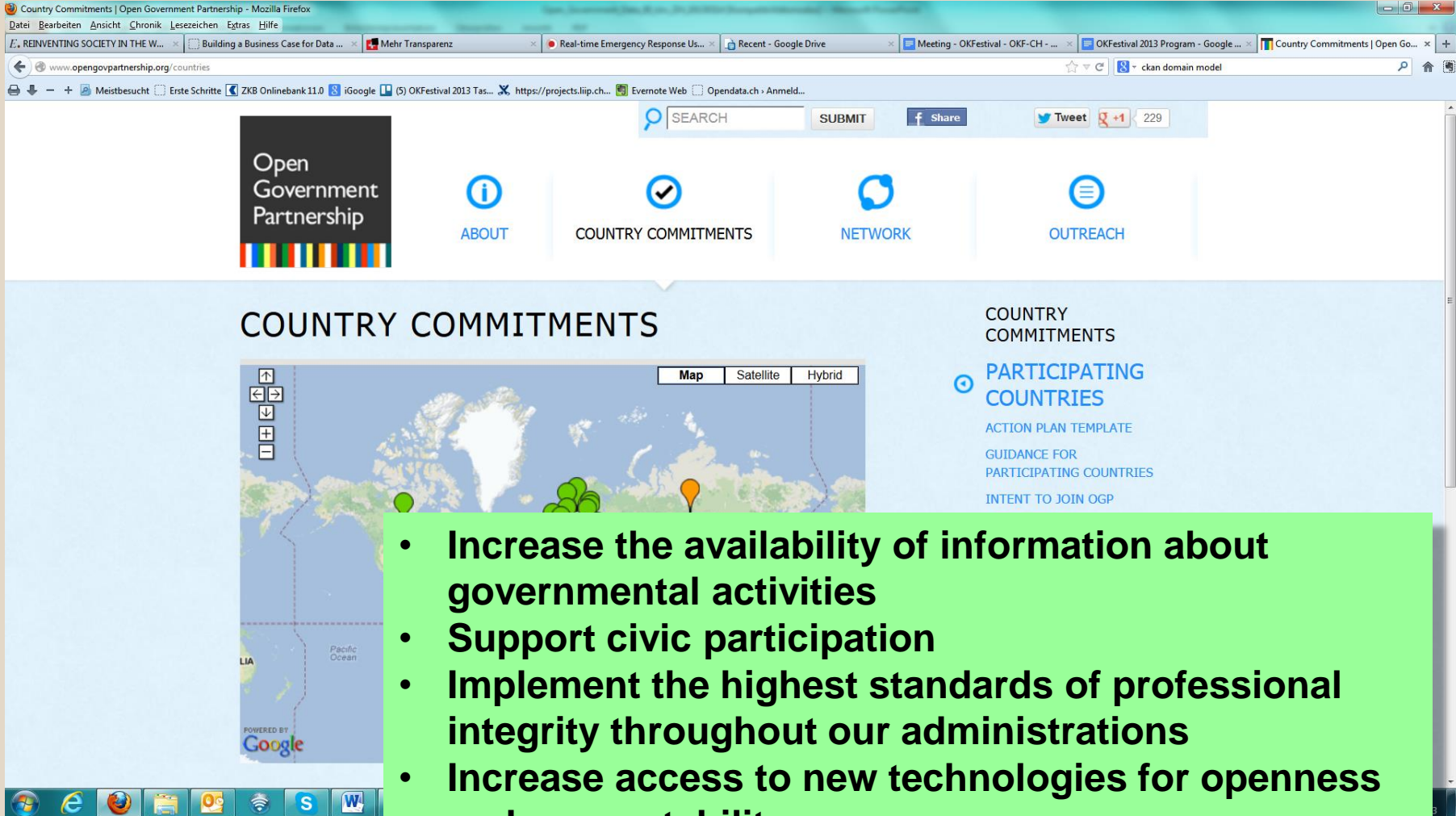
creative
commons



The Open Data Ecosystem



Open Government Partnership



The screenshot shows the Open Government Partnership website. The main navigation bar includes 'ABOUT', 'COUNTRY COMMITMENTS', 'NETWORK', and 'OUTREACH'. The 'COUNTRY COMMITMENTS' section is highlighted, featuring a map of the world with several green and orange location pins. To the right of the map, there are links for 'PARTICIPATING COUNTRIES', 'ACTION PLAN TEMPLATE', 'GUIDANCE FOR PARTICIPATING COUNTRIES', and 'INTENT TO JOIN OGP'. A green callout box is overlaid on the bottom right of the screenshot, containing a list of four bullet points.

- Increase the availability of information about governmental activities
- Support civic participation
- Implement the highest standards of professional integrity throughout our administrations
- Increase access to new technologies for openness and accountability



G8 (G7?) Open Data Charter

Principles:

- Open Data by Default
- Quality and Quantity
- Useable by All
- Releasing Data for Improved Governance
- Releasing Data for Innovation


Data Categories (alphabetical):

- Companies
- Crime and Justice
- Earth observation
- Education
- Energy and Environment
- Finance and contracts
- Geospatial
- Global Development
- Government Accountability and Democracy
- Health
- Science and Research
- Statistics
- Social mobility and welfare
- Transport and Infrastructure



Open Data index (index.okfn.org)

[OPEN DATA INDEX](#) [Home](#) [Countries](#) [About](#) [Contributors](#)



Sie befinden sich im Vollbildmodus. [Vollbildmodus beenden \(F11\)](#)

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COUNTRIES IN THE
THE INDEX

84 OF 700

KEY DATASETS IN THE
INDEX ARE OPEN


The Open Data Index assesses the state of open government data around the world.

An increasing number of governments have committed to open up data, but how much key information is actually being released? Is the available data legally and technically usable so that citizens, civil society and businesses can realise the full benefits of the information? Which countries are the most advanced and which are lagging in relation to open data? The Open Data Index has been developed to help answer such questions by collecting and presenting information on the state of open data around the world - to ignite discussions between citizens and governments.




[Full Country Index »](#)


See how different countries stack up against one another in the [Full Country Index](#).



1300+ SUBMISSIONS



60+ EDITORS



PRESS RELEASE

The Open Data Index is an initiative of the [Open Knowledge Foundation](#) and its [Working Groups](#) and [Local Groups](#).

The Index results are contributed by advocates and experts from the [open data](#) community around the world.

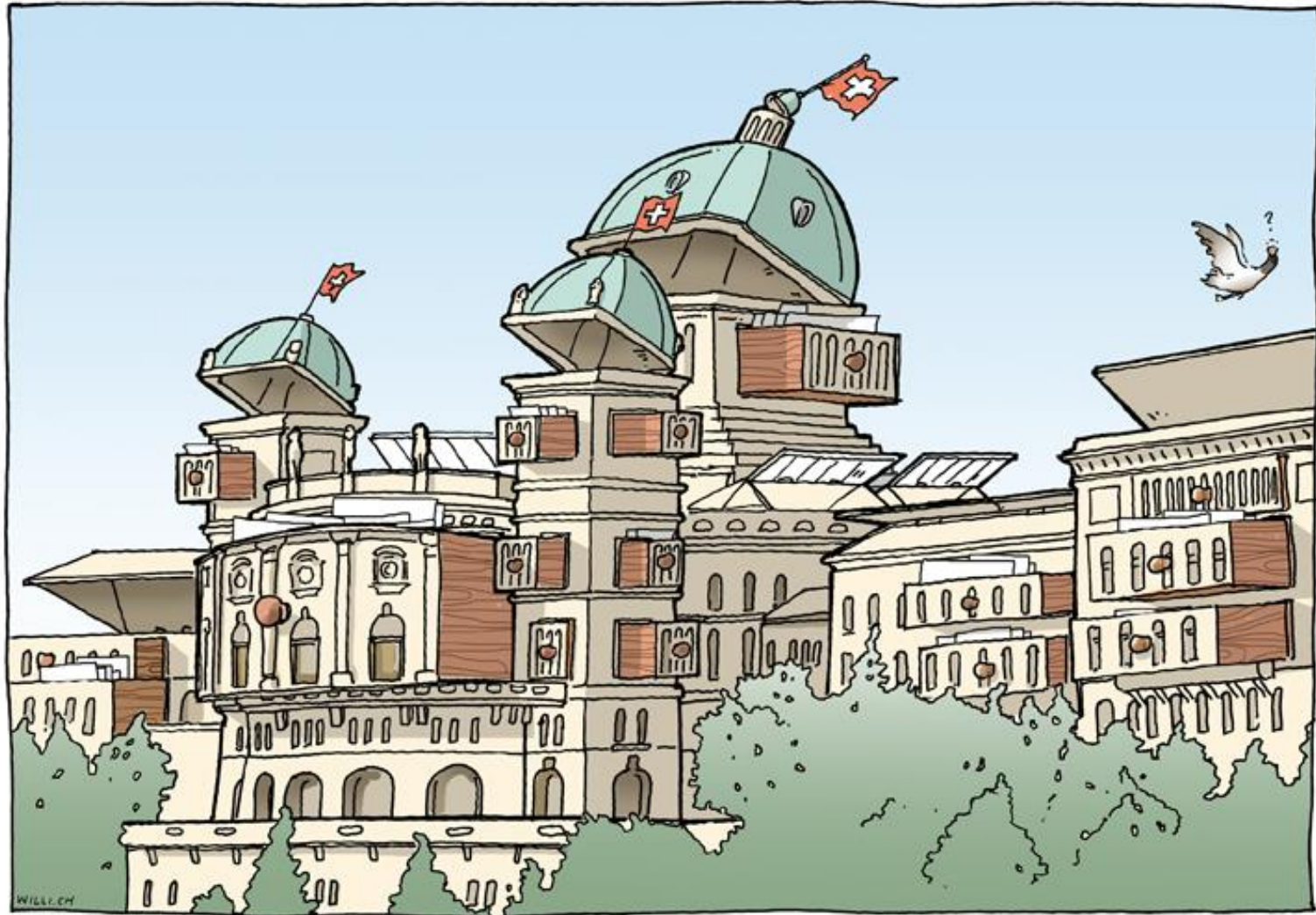
OPEN SERVICE
OPEN CONTENT
OPEN DATA

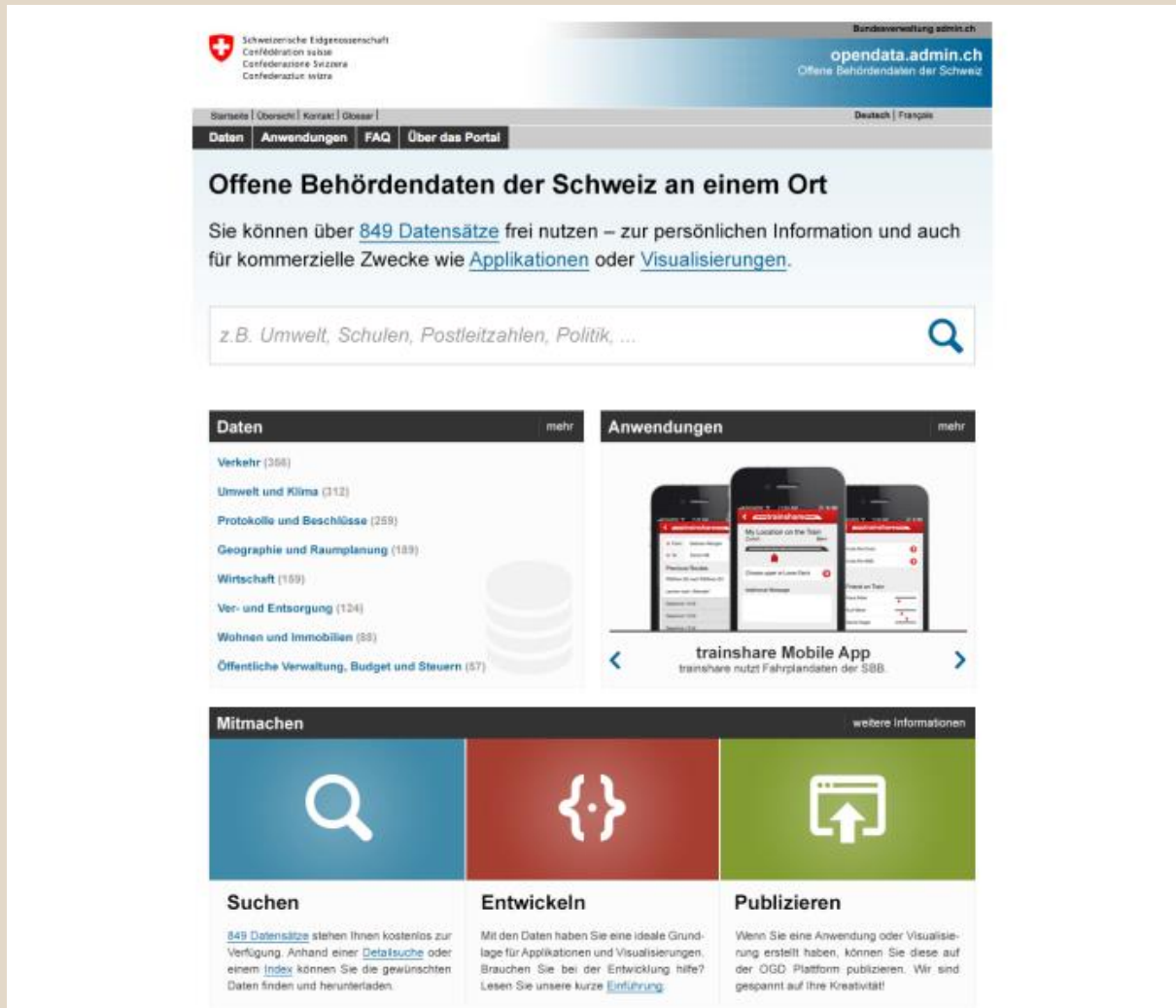
- [Contact us](#)
- [Report issues](#)
- [Open Data](#)
- [Source code](#)

Data Society - SDS 2014 - 21 March 2014

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Open Government Data in Switzerland





The screenshot shows the homepage of the Swiss Open Data Portal. At the top, it features the Swiss flag and the text 'Schweizerische Eidgenossenschaft' and 'Confédération suisse'. The main header includes 'opendata.admin.ch' and 'Offene Behördendaten der Schweiz'. A navigation bar contains links for 'Daten', 'Anwendungen', 'FAQ', and 'Über das Portal'. The main content area is titled 'Offene Behördendaten der Schweiz an einem Ort' and states that over 849 datasets are available for personal and commercial use. A search bar contains the text 'z.B. Umwelt, Schulen, Postleitzahlen, Politik, ...'. Below this, there are two main sections: 'Daten' and 'Anwendungen'. The 'Daten' section lists various categories with their respective counts, such as 'Verkehr (388)', 'Umwelt und Klima (312)', and 'Wirtschaft (169)'. The 'Anwendungen' section features a mobile app preview for 'trainshare Mobile App'. At the bottom, there is a 'Mitmachen' section with three icons: a magnifying glass for 'Suchen', a code icon for 'Entwickeln', and an upload icon for 'Publizieren'. Each icon has a corresponding text box explaining the process.

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Bundesverwaltung admin.ch
opendata.admin.ch
Offene Behördendaten der Schweiz

Startseite | Übersicht | Kontakt | Impressum | Deutsch | Français

Daten | Anwendungen | FAQ | Über das Portal

Offene Behördendaten der Schweiz an einem Ort

Sie können über [849 Datensätze](#) frei nutzen – zur persönlichen Information und auch für kommerzielle Zwecke wie [Applikationen](#) oder [Visualisierungen](#).

z.B. *Umwelt, Schulen, Postleitzahlen, Politik, ...*

Daten mehr

- Verkehr (388)
- Umwelt und Klima (312)
- Protokolle und Beschlüsse (259)
- Geographie und Raumplanung (189)
- Wirtschaft (169)
- Ver- und Entsorgung (124)
- Wohnen und Immobilien (88)
- Öffentliche Verwaltung, Budget und Steuern (57)

Anwendungen mehr

trainshare Mobile App
trainshare nutzt Fahrplandaten der SBB.

Mitmachen weitere Informationen

Suchen

[849 Datensätze](#) stehen Ihnen kostenlos zur Verfügung. Anhand einer [Datensuche](#) oder einem [Index](#) können Sie die gewünschten Daten finden und herunterladen.

Entwickeln

Mit den Daten haben Sie eine ideale Grundlage für Applikationen und Visualisierungen. Brauchen Sie bei der Entwicklung Hilfe? Lesen Sie unsere kurze [Einführung](#).

Publizieren

Wenn Sie eine Anwendung oder Visualisierung erstellt haben, können Sie diese auf der OGD Plattform publizieren. Wir sind gespannt auf Ihre Kreativität!

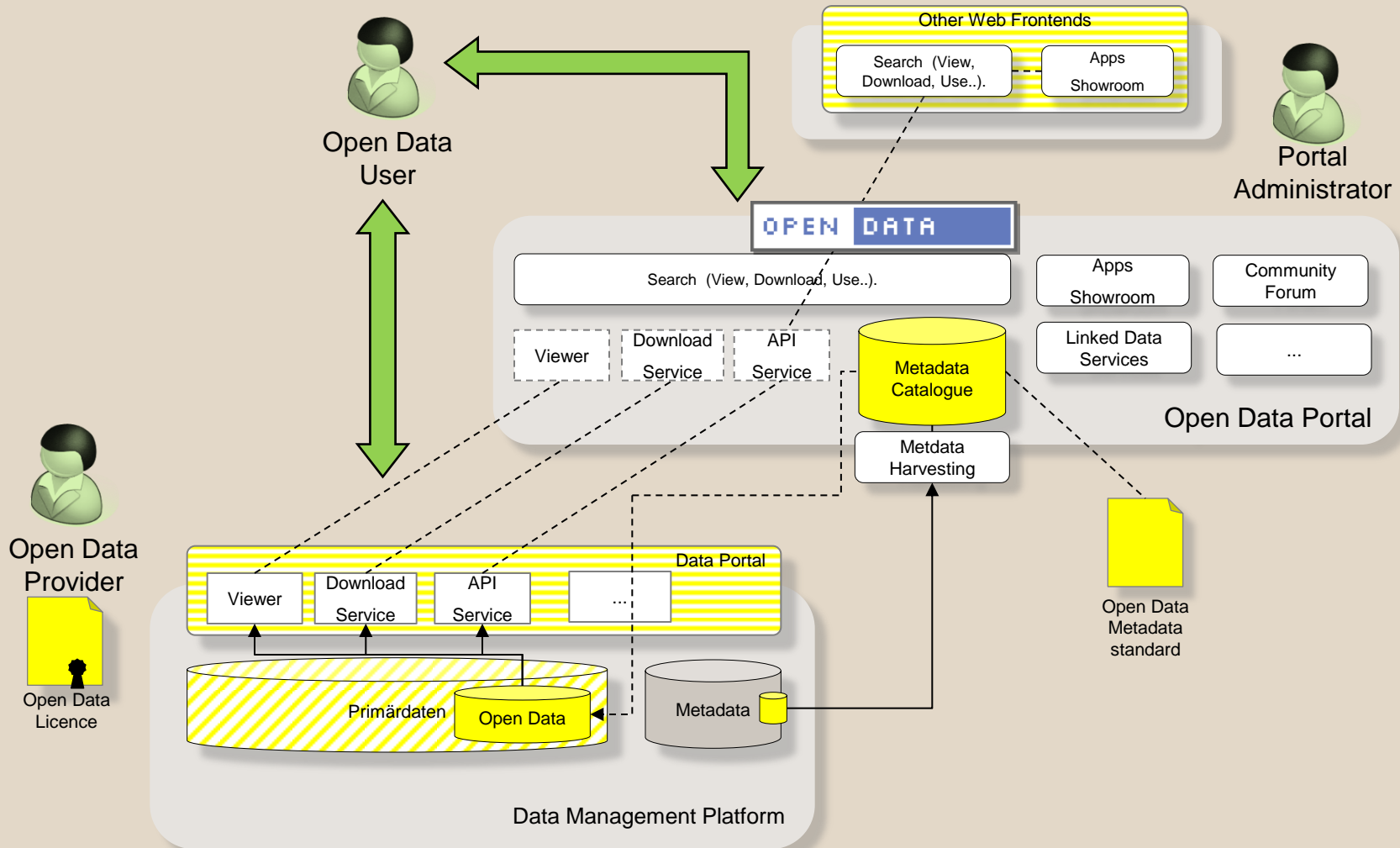
www.opendata.admin.ch – different Project Partners

Online:

- Swiss Federal Archives
- Federal Office of Topography swisstopo
- Federal Office of Meteorology and Climatology MeteoSwiss
- Swiss Statistics
- Swiss National Library
- Canton of Zurich
- Federal Office of Public Health
- Federal Office for the Environment

Coming next:

- Canton of Geneva
- Swissgrid
- City of Zurich




Project «Open Government Data Switzerland»



Projekt „OGD Schweiz“

Bern, 11. Dezember 2013


 Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra


Open Government Data-Strategie Schweiz 2014 – 2018

Vom Bundesrat am ... verabschiedet

Versionen

Version 0.1 (15.1.2014)	Version für die erste Lesung mit Fachausschuss (20.1.2014) und Projektausschuss des Projektes OGD Schweiz (22.1.2014)
Version 0.2 (31.1.2014)	Version für die Anhörung interessierter Kreise
Version 0.3 (TT.2.2014)	Version für Ämterkonsultation

 Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

 **KdK**
CdC
KONFERENZ DER KANTONSREGIERUNGEN
CONFERENCE DES GOUVERNEMENTS CANTONAUX
CONFERENZA DEI GOVERNI CANTONALI
CONFERENZA DA LAS REGENZAS CHANTUNALAS





Opendata.ch – the Swiss Open Data Movement

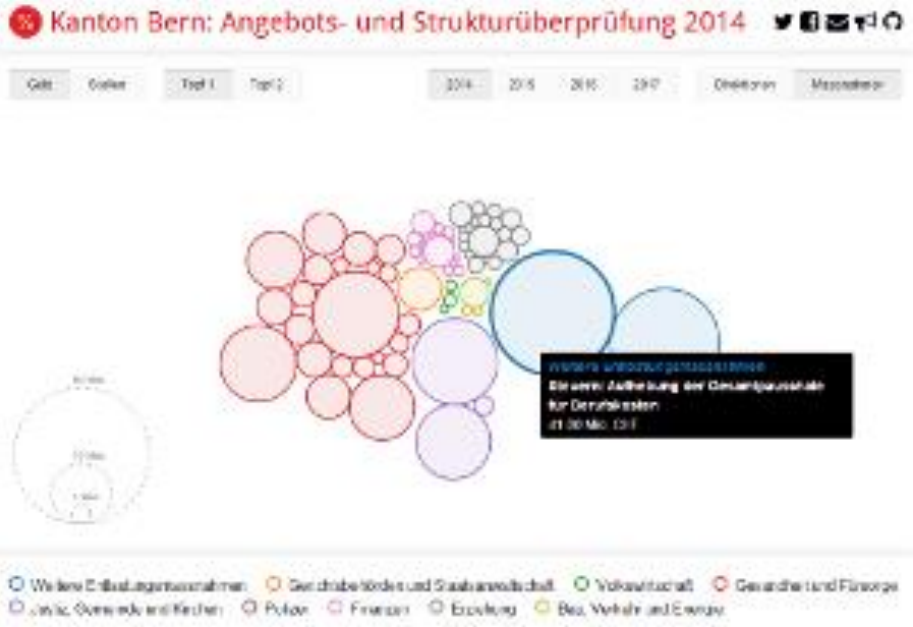
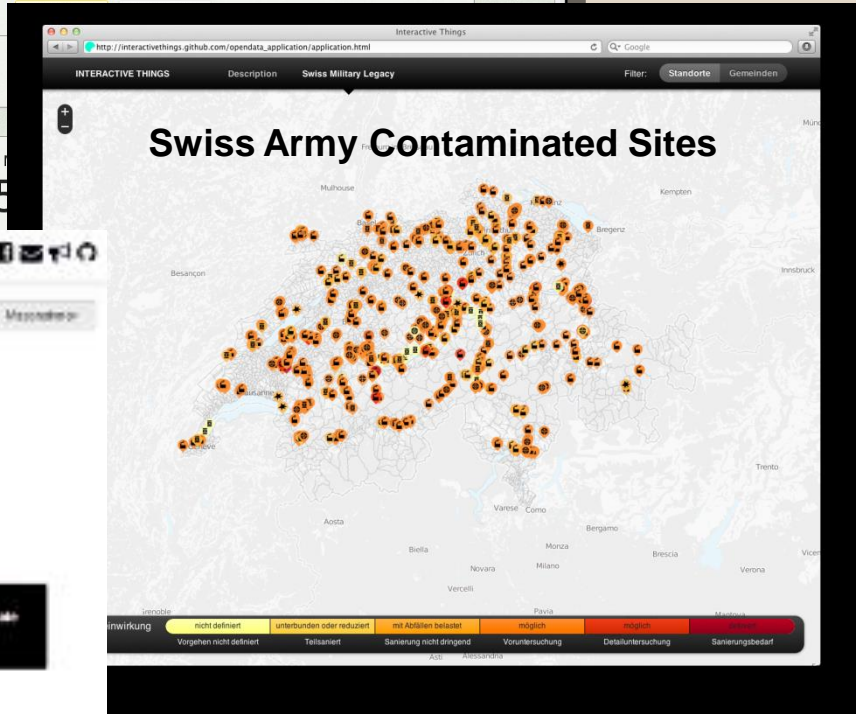
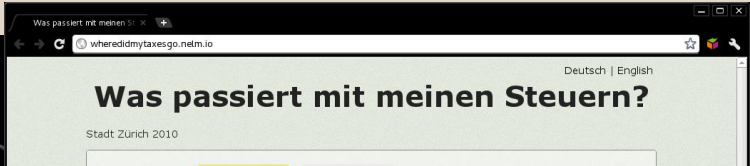


Hackdays:

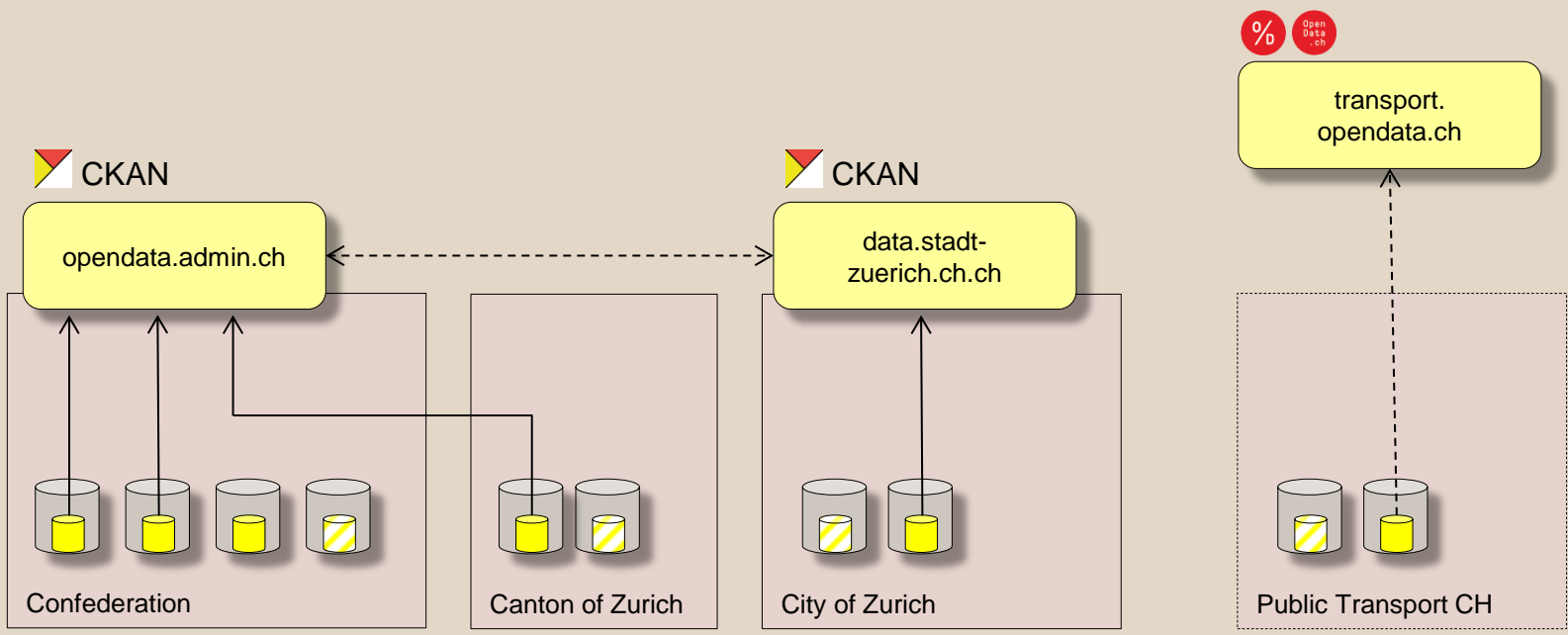
- ca. 500 Participants (Hackers, Designer, Journalists...)
- Over 70 Projects published (visit www.opendata.ch)
- Subjects: «Mobility», «Health», «Open Finance / Budget»
- Next: 24/25 May 2014 «Sports»

Open Data Apps

Der WC Finder Zürich



Open Data Infrastructure Switzerland (2014)



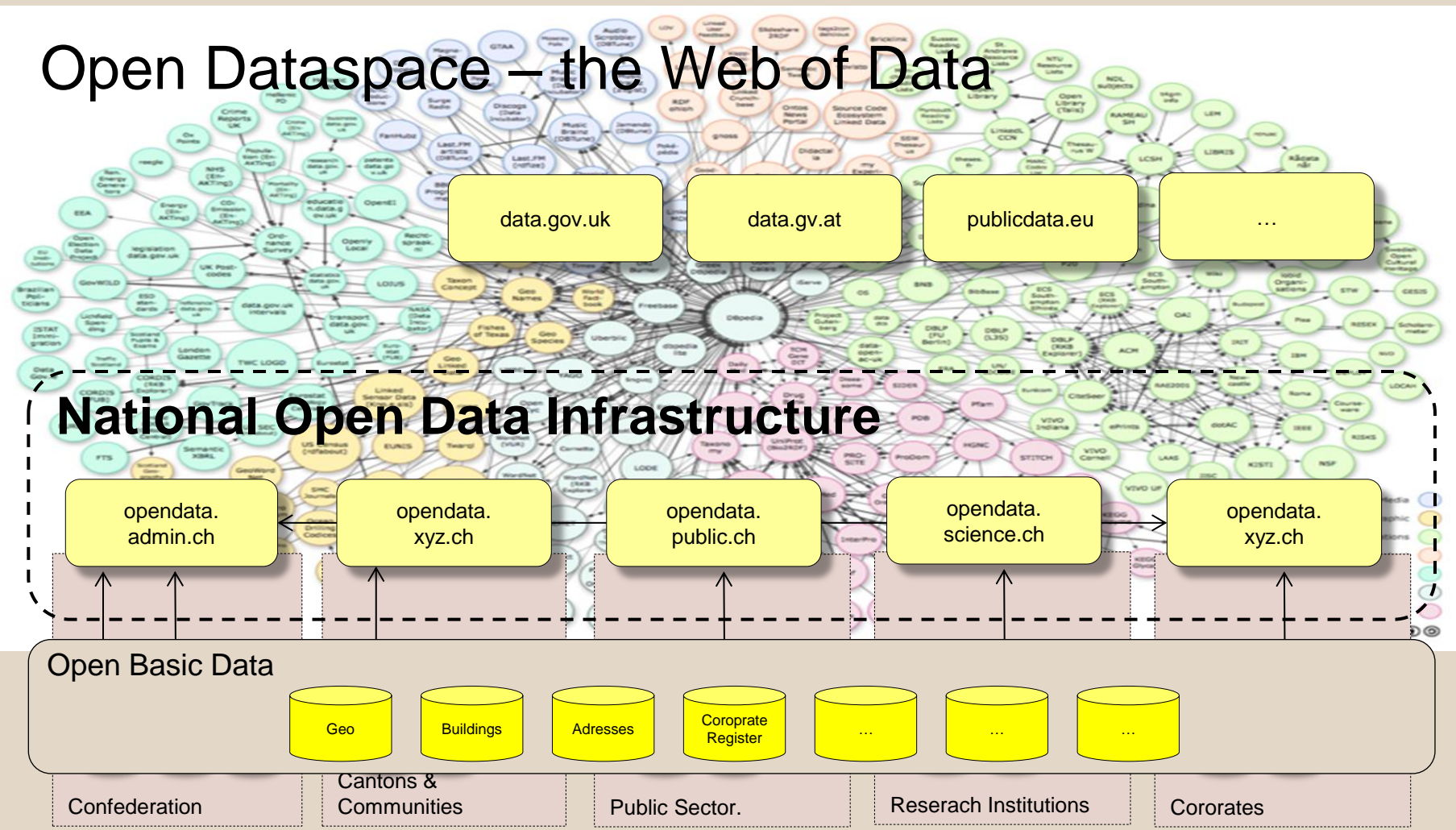


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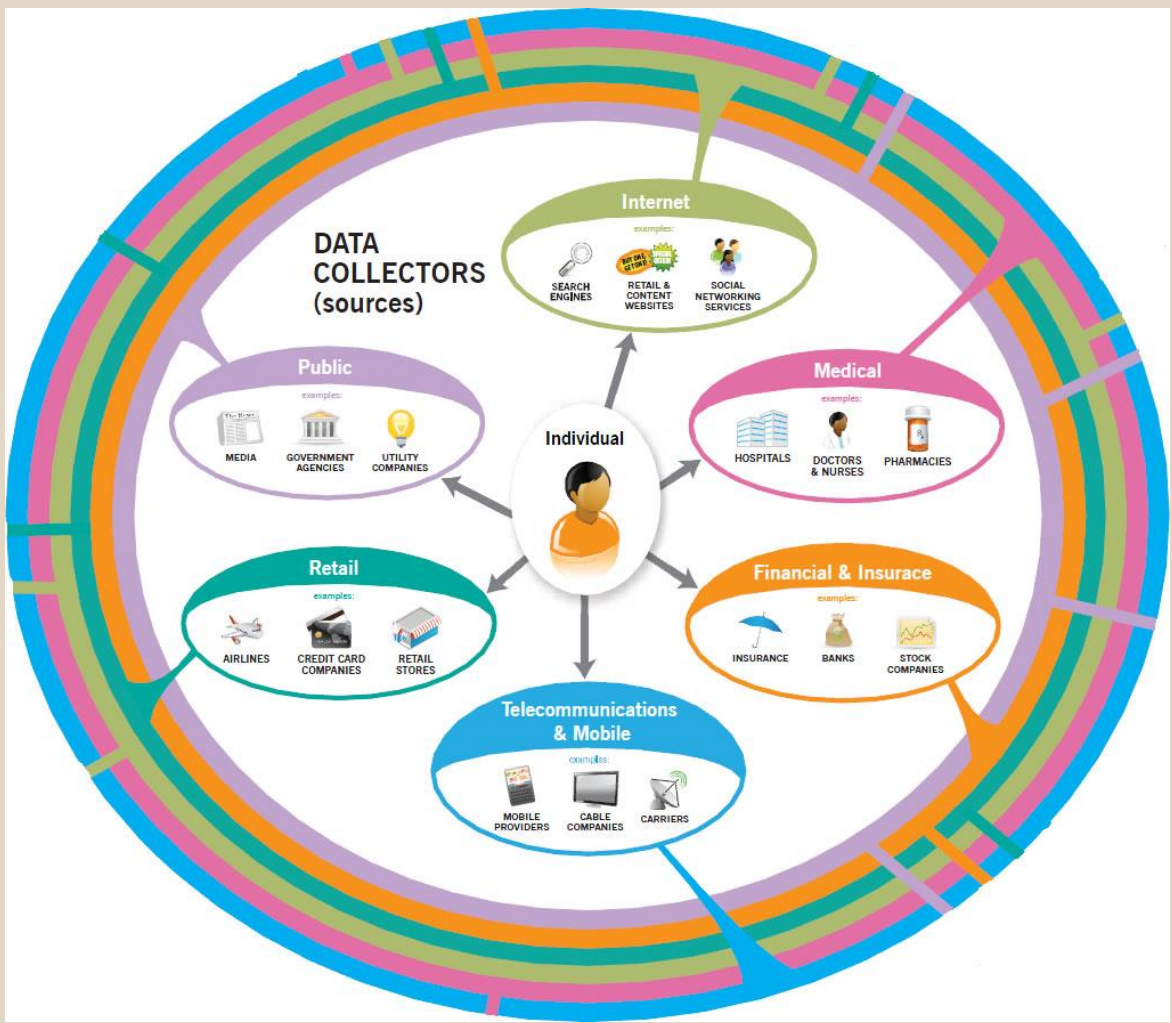
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National Open Data Infrastructure (2018+)

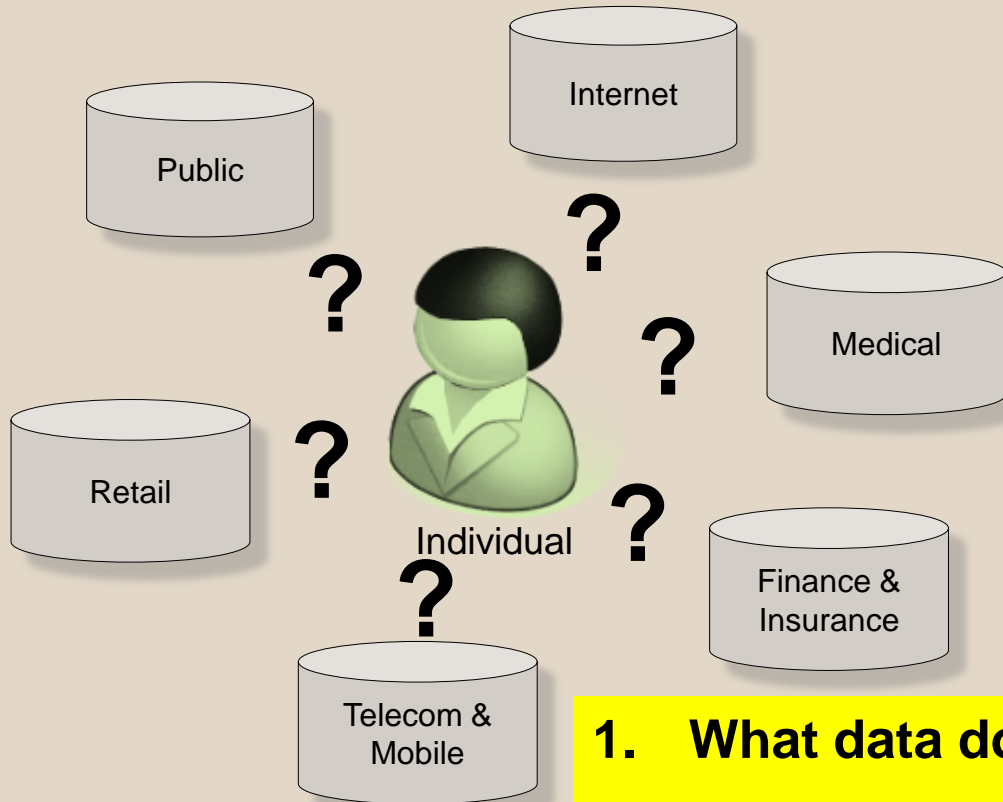
Open Dataspace – the Web of Data



The Personal Data Ecosystem

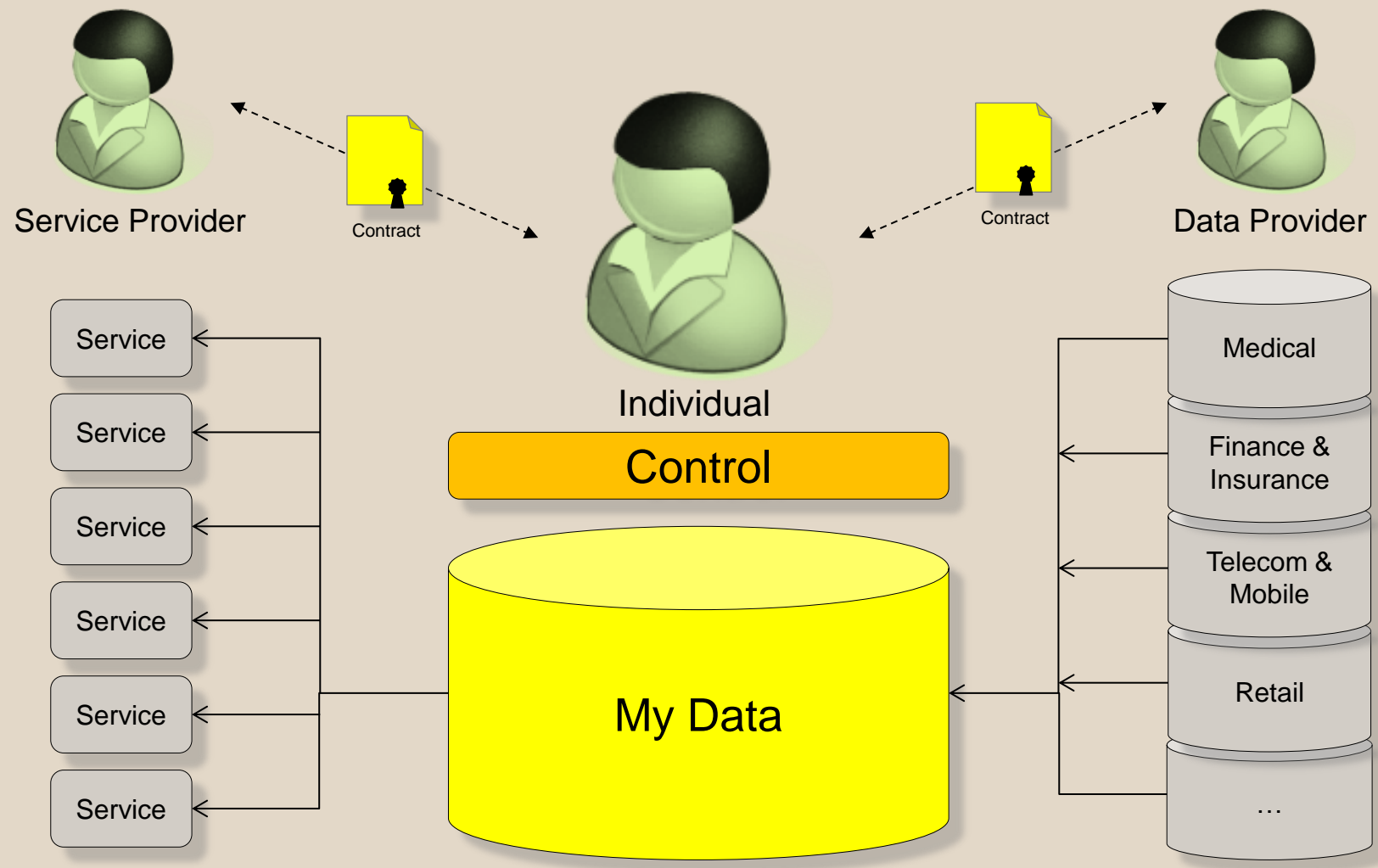


My Data?



1. What data do «they» collect about me?
2. What are «they» doing with my data?
3. How can I access and use my data?

The «My Data» Vision

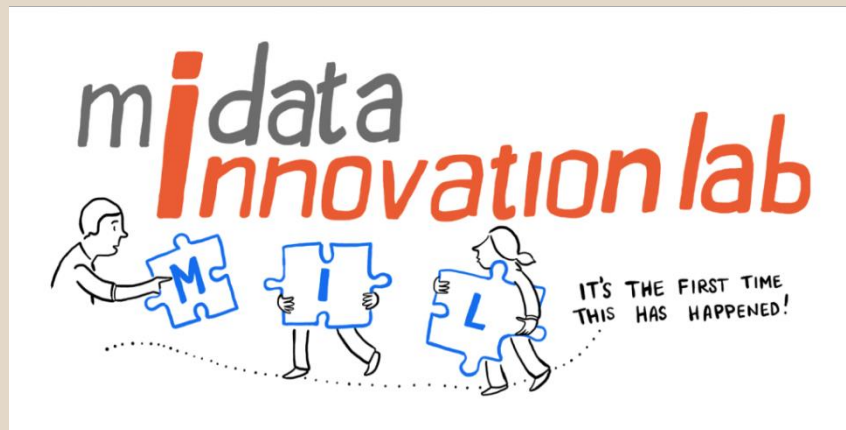




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«My Data» Initiatives...



WETI

FOR THE PEOPLE, BY THE PEOPLE!



Proposal for a Digital Bill of Rights

“... Create a world where everyone, everywhere is online and able to participate in a free flow of knowledge, ideas, collaboration and creativity over the open Web. We’ve come together in support of the following principles:

- **Affordable access** to a universally available communications platform
- **The protection of personal user information** and the right to communicate in private
- **Freedom of expression** online and offline
- **Diverse, decentralized and open infrastructure**
- **Neutral networks** that don’t discriminate against content or users”

Source: <https://webwewant.org>

Thank You For Your Attention!



Contact.

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