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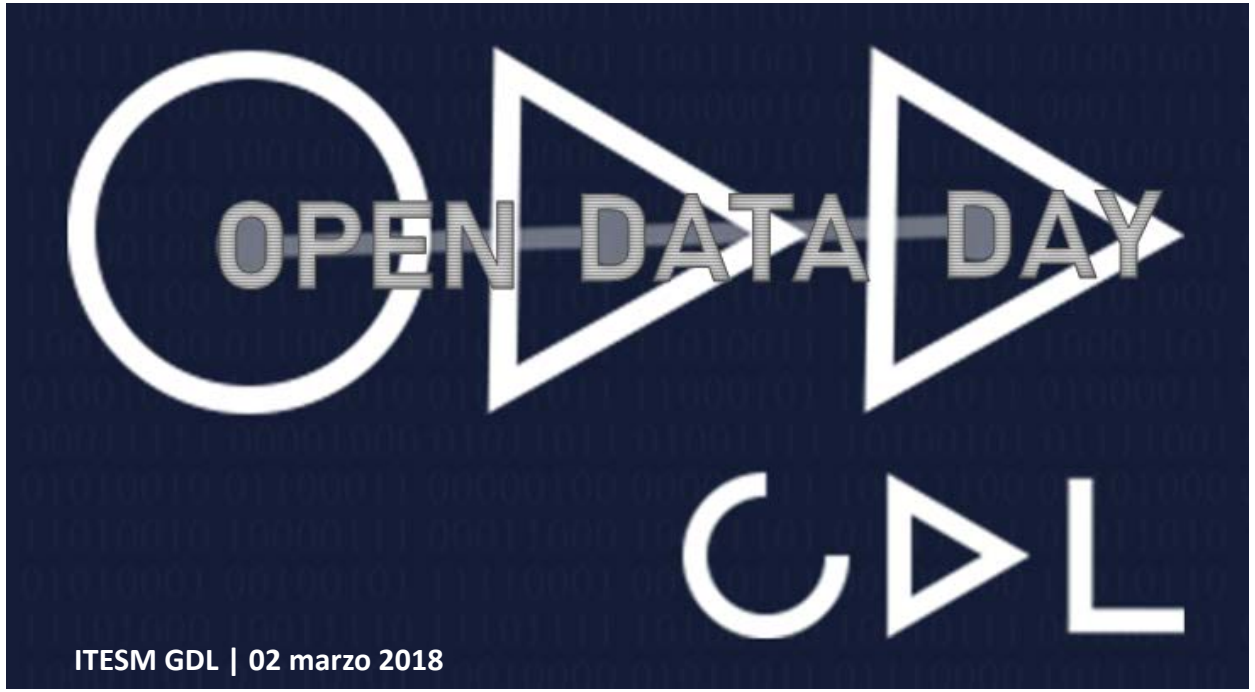
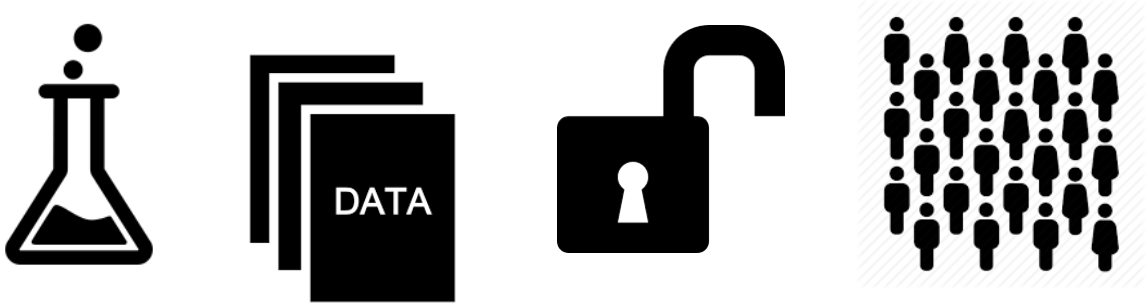


DATOS ABIERTOS DE INVESTIGACIÓN CIENCIA, INNOVACIÓN y SOCIEDAD



Martin-Adalberto Tena-Espinoza-de-los-Monteros

PhD KnowledgeSociety | USAL (ESP)

REBIUdeG – UDGVirtual | UdeG (MEX)

mtenaespinoza@udgvirtual.udg.mx

mtenaespinoza@académicos.udg.mx

#OpenDataDay | #OpenDataDayMX

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PROGRAMA DE DOCTORADO FORMACIÓN EN LA SOCIEDAD DEL CONOCIMIENTO

VNiVERSiDAD D SALAMANCA CAMPUS DE EXCELENCIA INTERNACIONAL

REBIUdeG

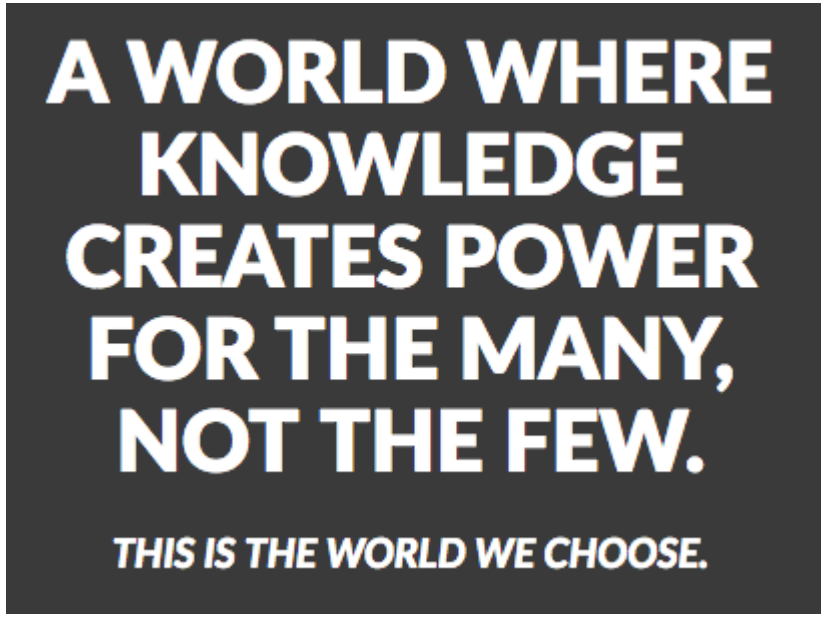
UDGVIRTUAL

UNIVERSIDAD DE GUADALAJARA Red Universitaria de Jalisco

OPEN DATA DAY

http://opendataday.org

Celebración anual alrededor del mundo |2010 - 2018
7º Celebración | 03 marzo 2018
Grupos de todo el mundo crean eventos locales en este día con la intención de usar los datos abiertos en sus comunidades para crear aplicaciones, visualizaciones, liberar datos o publicar análisis sobre el estado de los datos abiertos.
Es una oportunidad para mostrar los beneficios de la información abierta y alentar la adopción de políticas de datos abiertos en el gobierno, las empresas y la sociedad civil.



OPEN KNOWLEDGE INTERNATIONAL

https://okfn.org

¿A QUIÉN ESTÁ DIRIGIDO? ¡A TODXS!

Si tienes una idea que use datos abiertos, quieres encontrar un proyecto interesante para contribuir, aprender sobre cómo visualizar o analisar datos o simplemente quieres ver lo que está pasando, entonces ¡definitivamente ven a participar! La participación es un valor central del hackatón, todo el mundo es libre de expresar sus opiniones de forma constructiva. No importa qué habilidades tengas o cuáles sean tus intereses, invitamos a lxs organizadores a facilitar oportunidades de aprendizaje y ayudar a que la comunidad global de datos abiertos crezca.

Ciudadanxs

Todxs somos ciudadanxs, el día de los datos abiertos es un evento que nace de la ciudadanía. Si somos más, más eco tendremos. Son bienvenidas todas las personas que traigan ideas, promotorxs de proyectos y amigxs que ayuden a pasar la voz.

Servidorxs Públicos

Sus contribuciones son muy valiosas por cuanto entienden el contexto en el que se trabaja con ciertos datos, por lo que su visión y experiencia nos puede ayudar a mejorar los datos abiertos de los propios gobiernos. Vengan a conversar y a aprender cooperativamente.

Diseñadorxs

Ayuden a hacer que los datos sean cercanos, para que más personas los utilicen y los entiendan.

Desarrolladorxs

Utilicen sus habilidades para desarrollar soluciones que puedan ayudar a solucionar problemas sociales importantes.

Estadísticxs

Utilicen sus habilidades para entender los datos y aprender de ellos.

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Open Data Day

Compartido públicamente

61 de 148 temas (99+ no leídos)

Miembros · Acerca de

Hi there! Really excited you could join this mailing list!

People here are helping organize open data day events in their local cities - please feel free to ask for help, ideas and suggestions from your peers located around the world.

Dave

Lessons from Past Open Data Days
De David Eaves - 3 publicaciones - 590 vistas — 24/1/17

Montréal! (2)
De Robin Millette - 2 publicaciones - 12 vistas — 10:20

OpenDataDay in India (1)
De Tilok Chetri - 1 publicación - 1 vista — 1:55

How to change Entry in Map of Events? (1)
De Wolfram Eberius - 1 publicación - 3 vistas — 25 de feb.

Participe do HACKATHON OPEN DATA DAY MACEIÓ 2018 - 02 e 03 de março na Estácio FAL. (1)
De Thiago Avila - 1 publicación - 3 vistas — 25 de feb.

Dia dos Dados Abertos Porto Alegre (1)
De Marlise Brenol - 1 publicación - 6 vistas — 20 de feb.

Hashtag for Open Data Day 2018 (3)
De Nikesh Balami - 3 publicaciones - 15 vistas — 20 de feb.

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OPEN DATA DAY 2018

Para el Día de los datos abiertos 2018 queremos mejorar más. El enfoque este año será en cuatro áreas claves que creemos que los datos abiertos pueden ayudar a resolver.

Datos abiertos de **investigación**

Rastreo de flujos de **dinero** público

Datos abiertos sobre **medio ambiente**

Datos abiertos sobre **derechos**

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OPEN DEFINITION 2.1

The Open Definition sets out principles that define **"openness"** in relation to data and content. It makes precise the meaning of **"open"** in the terms **"open data"** and **"open content"** and thereby ensures quality and encourages compatibility between different pools of open material. It can be summed up in the statement that:

"Open means anyone can freely access, use, modify, and share for any purpose (subject, at most, to requirements that preserve provenance and openness)."

[The Open Definition | Open Knowledge International – Source Code]

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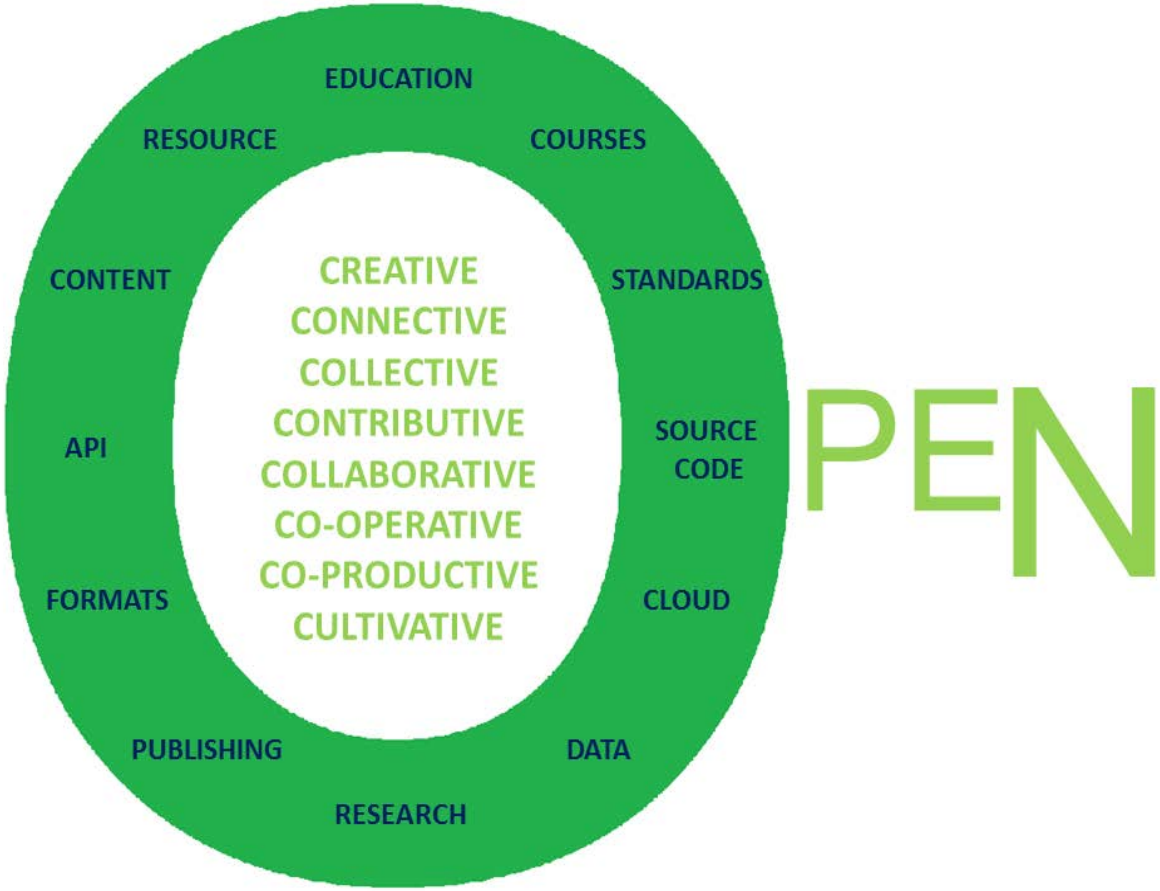
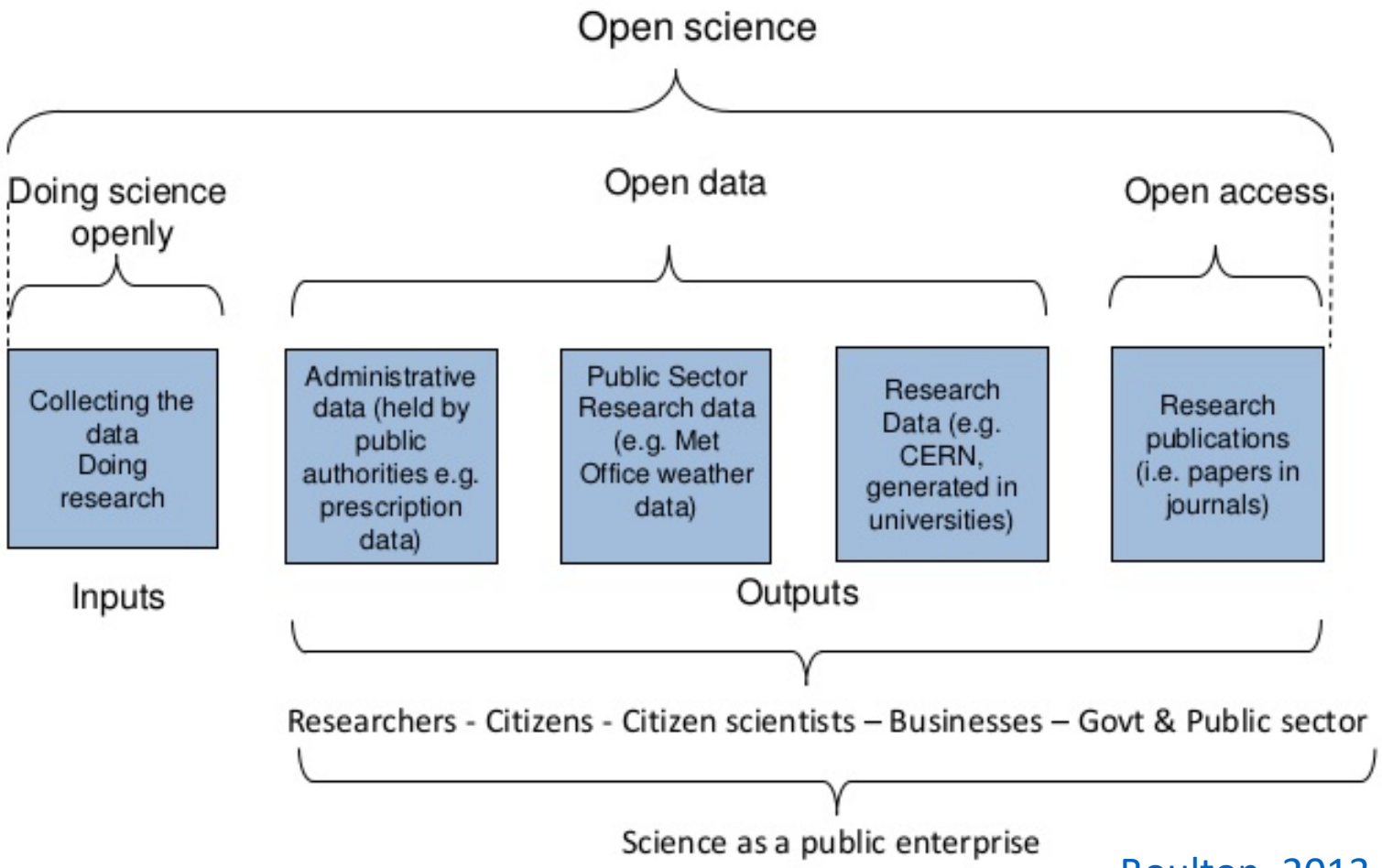


"Unlocking the Potential" by Wayne Barry

The Open Movement CCBY Katja Mayer

A taxonomy of openness



Boulton, 2013

OPEN DATA

La definición de datos abiertos entiende que el adjetivo "abiertos", aplicado a datos o contenidos, se refiere a un conjunto de contenidos o datos que cualquier persona es libre de usar, reutilizar y redistribuir, con sujeción únicamente y como máximo, a la necesidad de atribución. En lo referido a datos, esto se extiende a toda información susceptible de ser puesta a disposición del público; muy especialmente, la información de carácter público emanada o producida por instituciones públicas, y la información resultante de la investigación científica.*

UNESCO – ALADI (Juan Carlos Lara y Carolina Rossini)

Poner a disposición de la sociedad los datos de interés común de la ciudadanía para que, de cualquier forma, éstos puedan desarrollar una nueva idea o aplicación que entregue nuevos datos, conocimientos u otros servicios que el gobierno no es capaz de entregar.

CEPAL (Comisión Económica para América Latina y el Caribe)

Los datos abiertos son datos que pueden ser utilizados, reutilizados y redistribuidos libremente por cualquier persona, y que se encuentran sujetos, cuando más, al requerimiento de atribución y de compartirse de la misma manera en que aparecen.

Open Knowledge International (The Open Data Handbook)

OPEN DATA

Open Data is the idea that data should be freely available for everyone to access, use and republish as they wish, published without restrictions from copyright, patents or other mechanisms of control.
OGP (Open Government Partnership)

Los datos se consideran abiertos si alguien puede utilizarlos, re-utilizarlos y redistribuirlos gratuitamente para cualquier fin, sin restricciones. Si bien, una gran cantidad de información es publicada en los sitios web de los gobiernos, gran parte está destinada a ser leída como documentos individuales y no a re-utilizarse con otros fines. Para que los datos se consideren "abiertos," estos deben poder ser re-utilizables, es decir, que puedan ser descargados en formatos abiertos, ser leídos por diversos softwares, y que los usuarios tengan el derecho legal de re-utilizarlos.
WB (World Bank)

Open Data is research data that is freely available on the internet permitting any user to download, copy, analyse, re-process, pass to software or use for any other purpose without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself.
SPARC (Scholarly Publishing and Academic Resources Coalition)

OPEN DATA

Open data is data that anyone can access, use and share. Open data becomes usable when made available in a common, machine-readable format. Open data must be licensed. Its licence must permit people to use the data in any way they want, including transforming, combining and sharing it with others, even commercially.
EU (European Commission)

Open data is data that anyone can access, use or share. Simple as that.
ODI (Open Data Institute)

Open data is a broad concept that doesn't just apply to research data, but also to, for example, the opening up of government data. Many of the underlying ideas are similar: the goal of open data, whether it involves research data or census data, is to make data available to anyone and reusable by anyone for further analysis.
F1000-ResearchBlog (by Eva Amsen)

OPEN DATA

Open data are the building blocks of open knowledge. Open knowledge is what open data becomes when it's useful, usable and used.

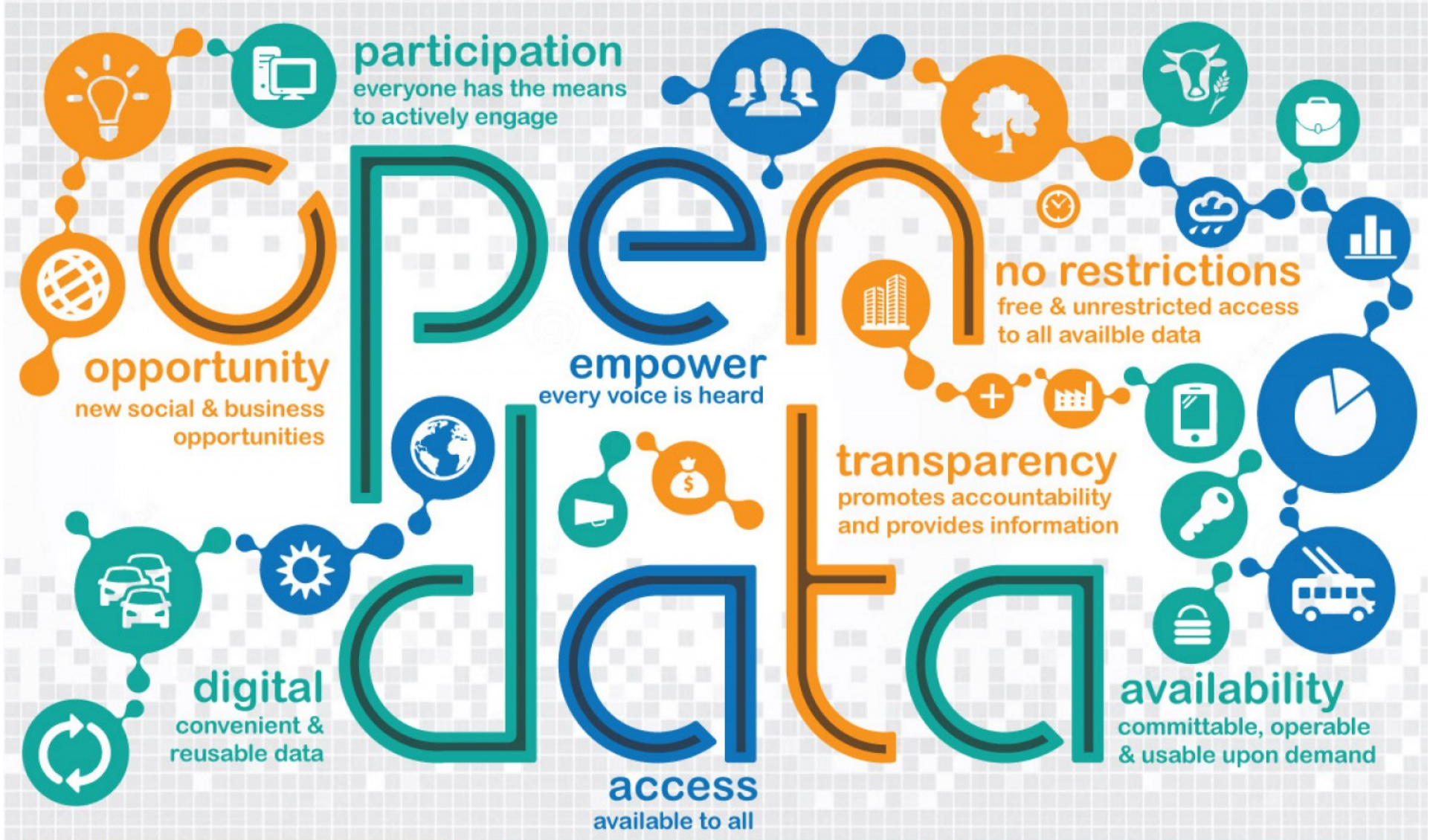
The key features of openness are:

Availability and access: the data must be available as a whole and at no more than a reasonable reproduction cost, preferably by downloading over the internet. The data must also be available in a convenient and modifiable form.

Reuse and redistribution: the data must be provided under terms that permit reuse and redistribution including the intermixing with other datasets. The data must be machine-readable.

Universal participation: everyone must be able to use, reuse and redistribute — there should be no discrimination against fields of endeavour or against persons or groups. For example, 'non-commercial' restrictions that would prevent 'commercial' use, or restrictions of use for certain purposes (e.g. only in education), are not allowed.

OKFN (Open Knowledge International)



Availability & Access

Open data must be available as a whole and at no more than a reasonable reproduction cost, preferably by downloading over the internet in a convenient and modifiable form.

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Universal Participation

Everyone must be able to use, reuse and redistribute - there should be no discrimination against fields of endeavour or against persons or groups.

OPEN ACCESS

Es aquel que permite el libre accesso a los recursos digitales derivados de la producción científica o académica sin barreras económicas o restricciones derivadas de los derechos de copyright sobre los mismos. Esta producción engloba no sólo artículos publicados en revistas, sino también otro tipo de documentos como objetos de aprendizaje, imágenes, datos, documentos audiovisuales, etc. El accesso es online a través de Internet, y salvo limitaciones tecnológicas y de conexión a la red del usuario no debería estar restringido por otro tipo de imposiciones.
Peter Suber (2006)

Existen tres declaraciones internacionales que han definido “Open Access”.

La **Declaración de Budapest** (2002) define al acceso abierto.

La **Declaración de Bethesda** (2003) establece dos condiciones para el acceso abierto.

La **Declaración de Berlín** (2003) define a la investigación científica y sus objetivos.

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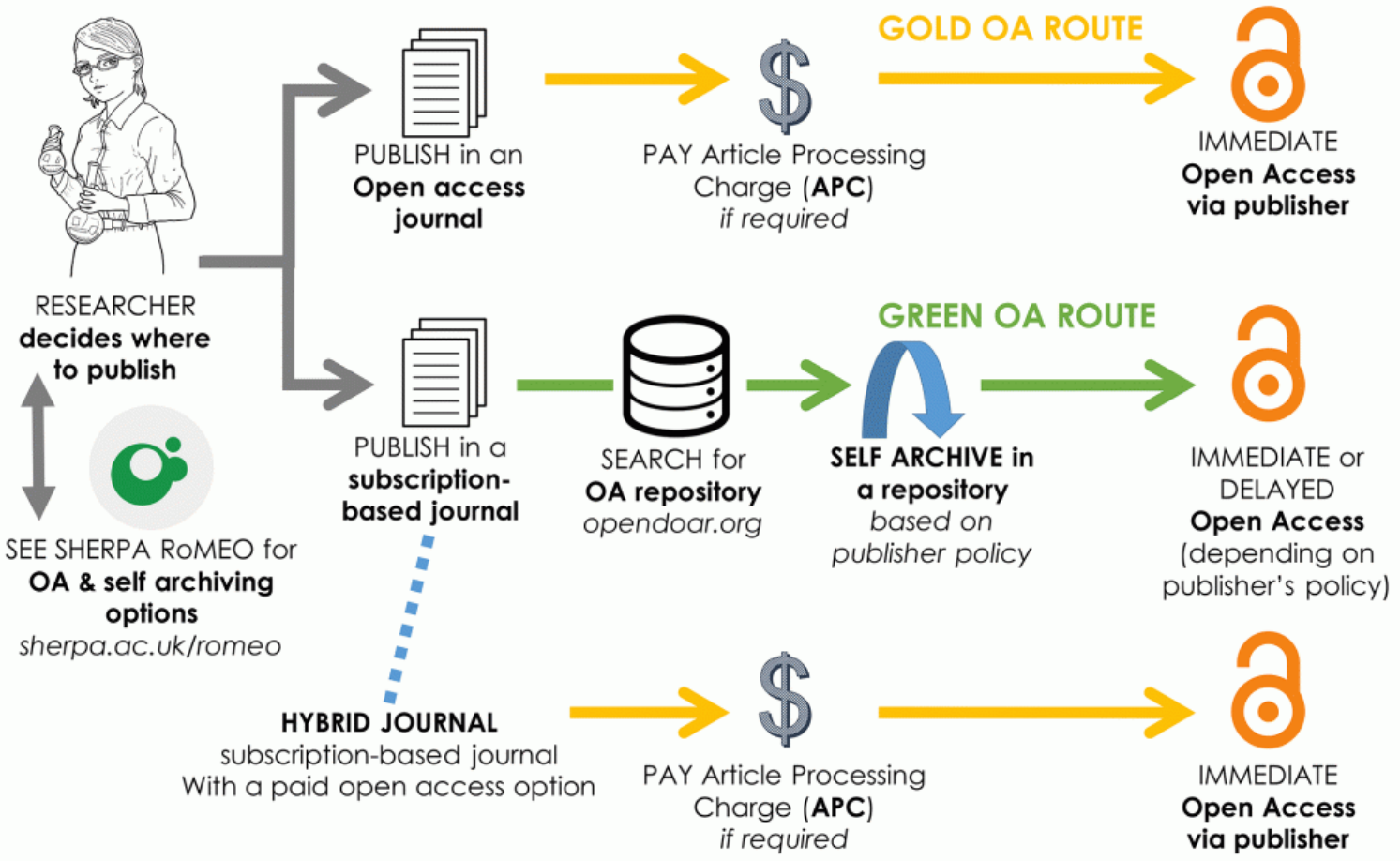
Open Access Publishing



Darren Chase | darren.chase@stonybrook.edu Stony Brook University | Libraries

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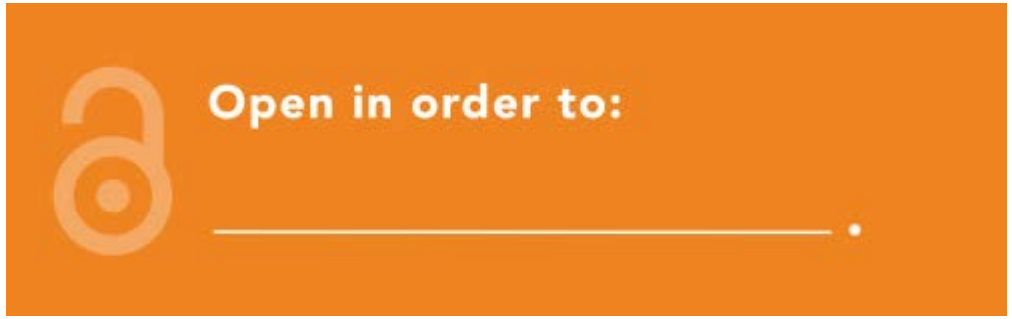
OPEN International ACCESS WEEK

Theme of 2017 International Open Access Week:



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OPEN SCIENCE

Open Science is the practice of science in such a way that others can collaborate and contribute, where research data, lab notes and other research processes are freely available, under terms that enable reuse, redistribution and reproduction of the research and its underlying data and methods.

FOSTER (Facilitate Open Science Training for European Research)

Open Science represents a new approach to the scientific process based on cooperative work and new ways of diffusing knowledge by using digital technologies and new collaborative tools. The idea captures a systemic change to the way science and research have been carried out for the last fifty years: shifting from the standard practices of publishing research results in scientific publications towards sharing and using all available knowledge at an earlier stage in the research process.

European Commission

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OPEN SCIENCE

In response to these concerns, governments and the research community, including publishers, are seeking to preserve and promote more openness in research. "Open science" refers to an approach to research based on greater access to public research data, enabled by ICT tools and platforms, and broader collaboration in science, including the participation of non-scientists, and finally, the use of alternative copyright tools for diffusing research results. Open science has the potential to enhance the efficiency and quality of research by reducing the costs of data collection, by facilitating the exploitation of dormant or inaccessible data at low cost and by increasing the opportunities for collaboration in research as well as in innovation. Greater access to research data can also help advance science's contribution to solving global challenges by enhancing access to data on a global scale (e.g. in the case of climate change data). Open science can also be used to promote capacity building in developing countries while generating opportunities for scientific collaboration and innovation between OECD and developing countries.

OCDE (Organización para la Cooperación y el Desarrollo Económicos)

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OPEN SCIENCE

Open science is the concept of opening up all aspects of scientific research, to allow others to follow the process and collaborate. There is no formal definition of open science, but it usually incorporates some of the aspects we looked at before, such as open access, open peer review, post-publication peer review, and open data. Additionally, it includes other ways to make science more transparent and accessible during the research process, and we will discuss them here: open notebook science, citizen science, and aspects of open source software and crowdfunded research projects.

F1000-ResearchBlog (by Eva Amsen)

Defining Open Science Definitions

Jeroen Bosman & Bianca Kramer

What, exactly, is Open Science?

Dan Gezelter

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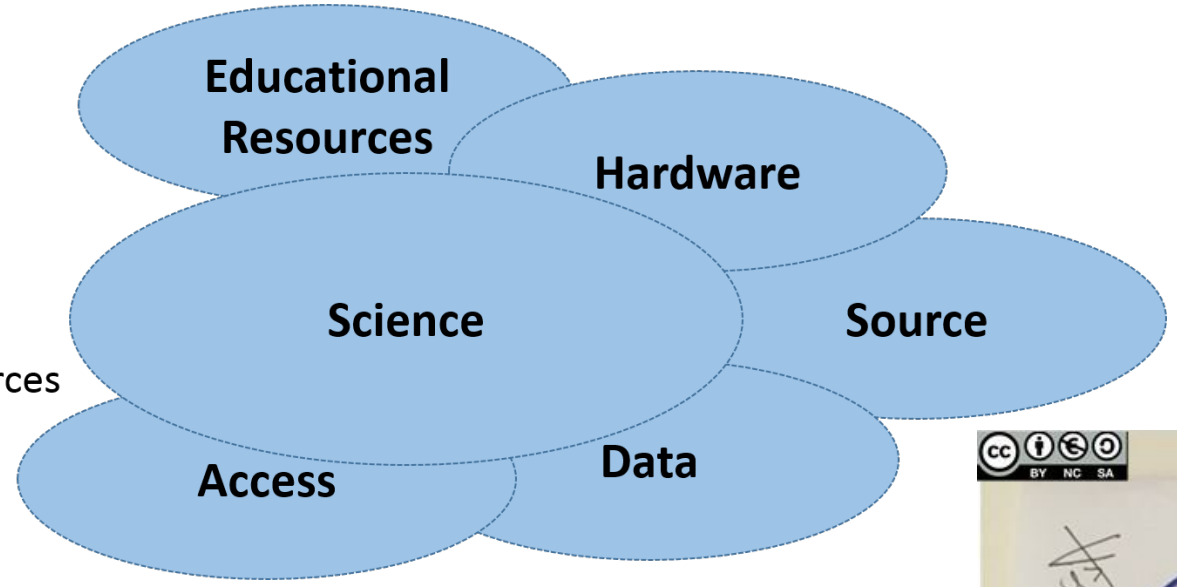
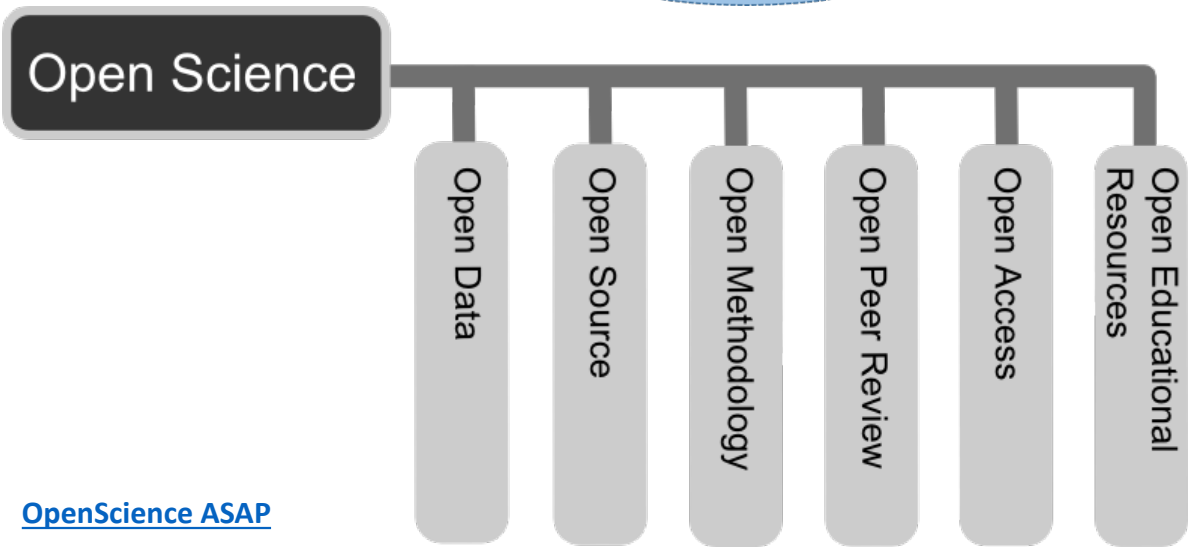
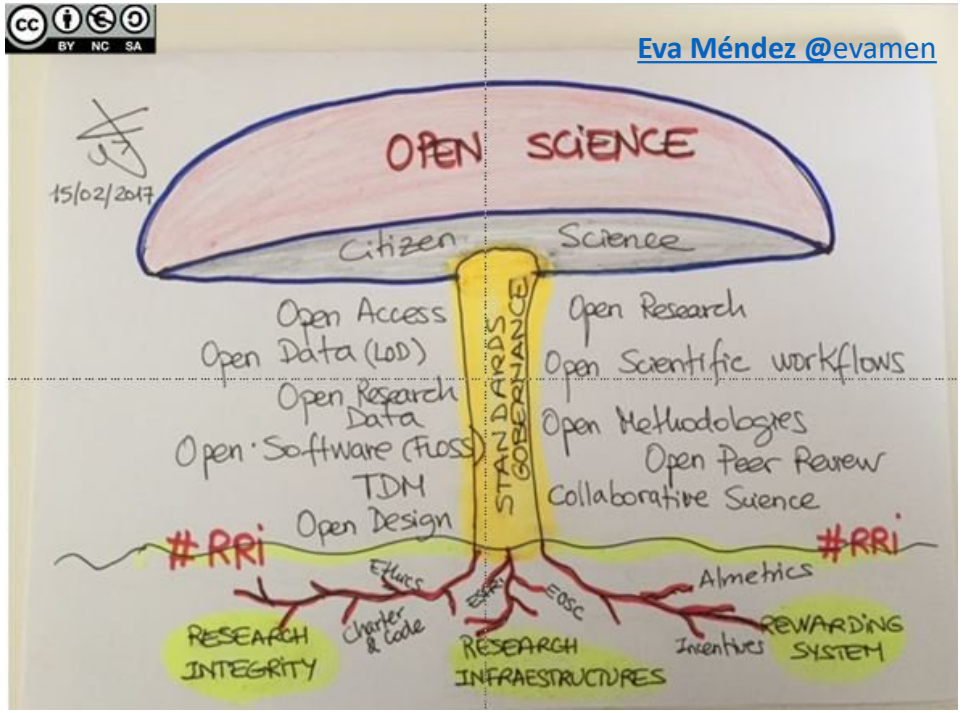
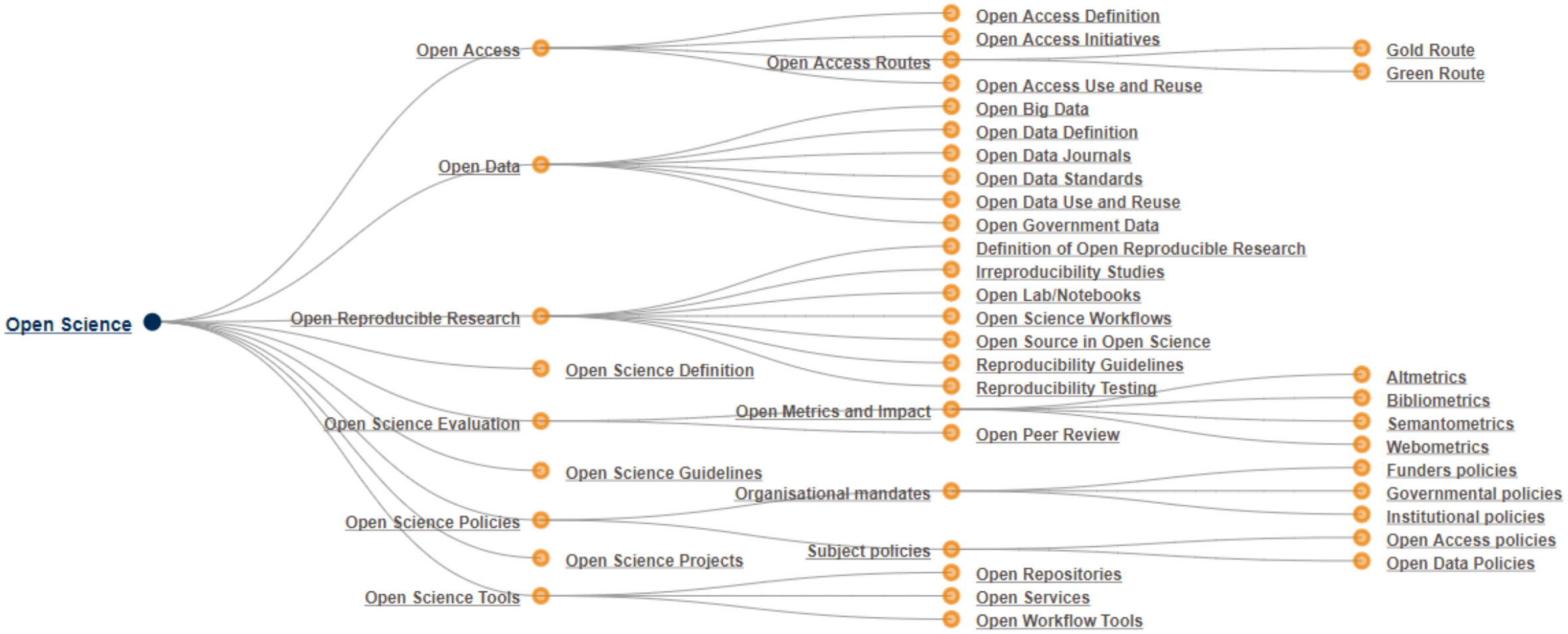
- Open **S**ource
- Open **H**ardware
- Open **A**ccess
- Open **D**ata
- Open **E**ducational Resources
- Open **S**cience



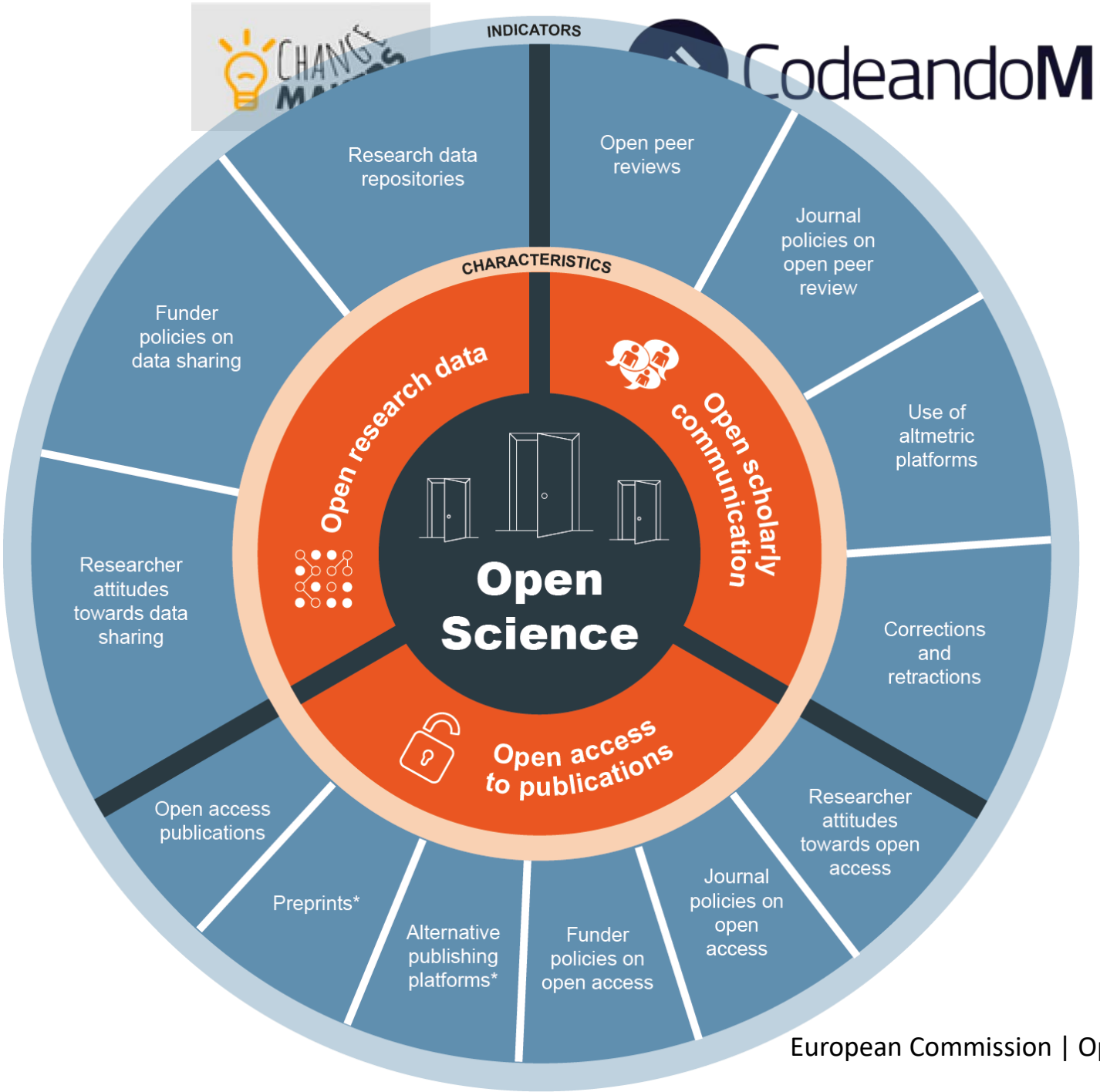


OpenScience ASAP





FOSTER Taxonomy



European Commission | Open Research Publishing Platform

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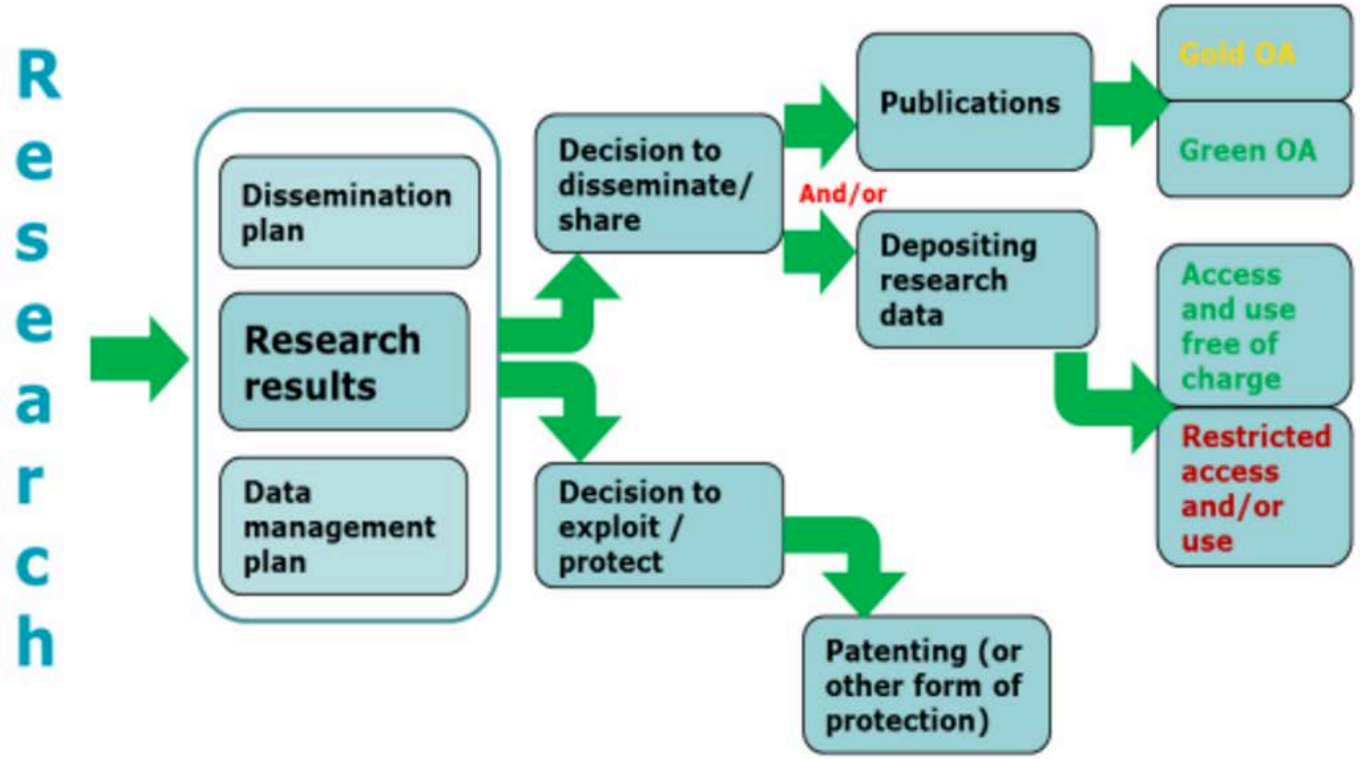
OPEN SCIENCE

Open science is the idea that scientific knowledge of all kinds should be openly shared as early as is practical in the discovery process.

Michael Nielsen

Research data comprises research observations or findings, such as facts, images, measurements, records and files in various formats, and can be stored in databases. Data publication and archiving is important for the reuse of research data and the reproducibility of scientific research.
Nature

Open research data refers to the data underpinning scientific research results that have no restrictions on their access, enabling anyone to access them through the internet.
European Commission



Graph: Open access to scientific publication and research data in the wider context of dissemination and exploitation

European Commission - Research & Innovation

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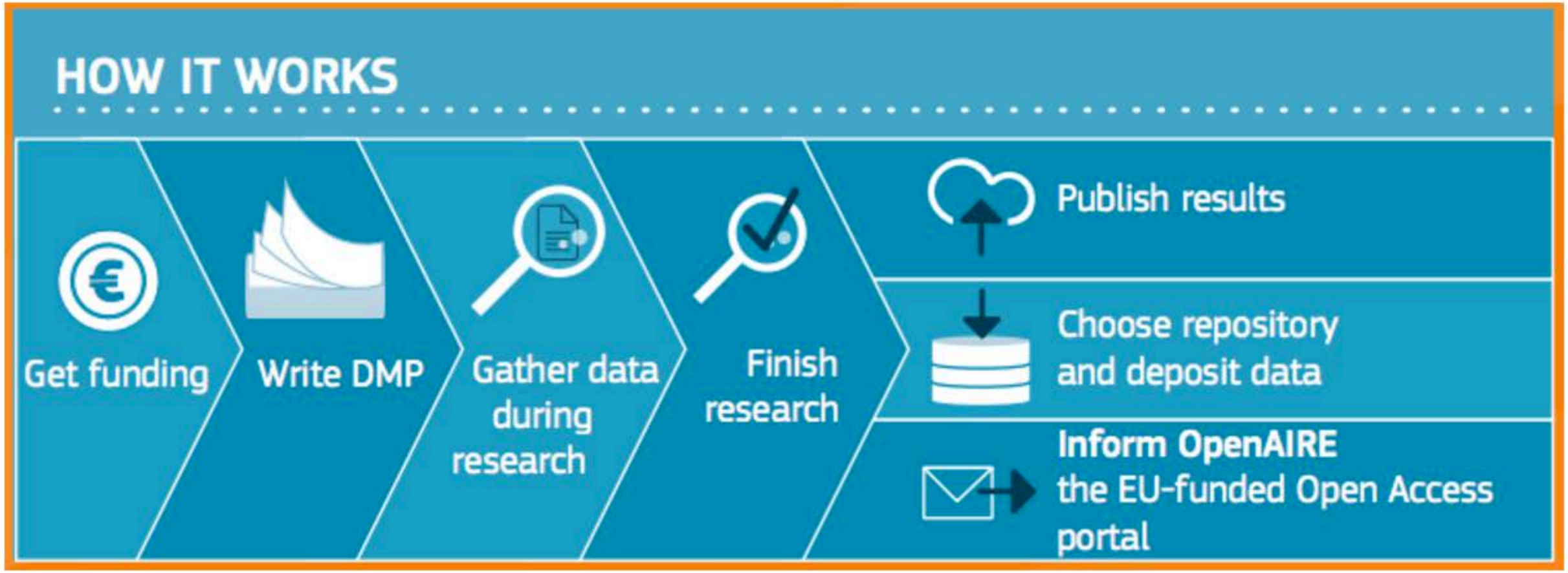

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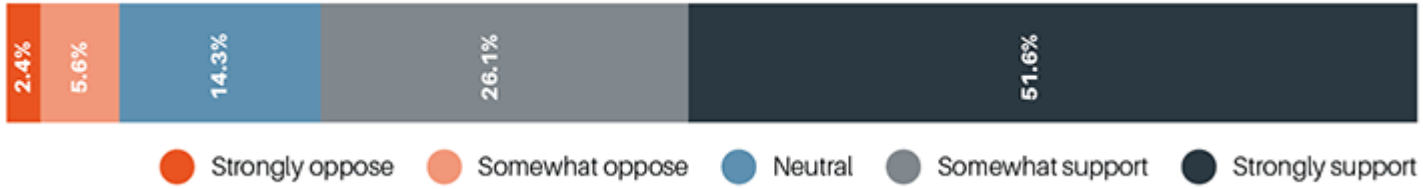
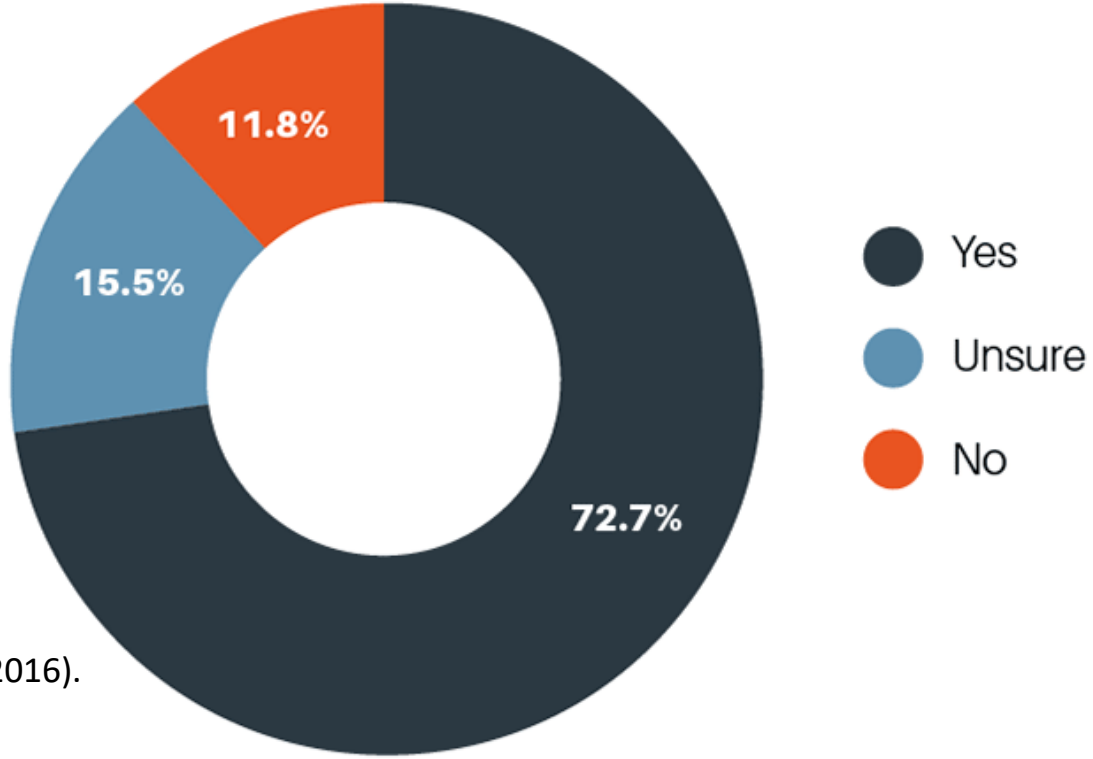
How supportive would you be of a national mandate for open data?



Are you aware of any research data that is free to access, reuse, repurpose, and redistribute?



The State of Open Data survey was run by figshare, Springer Nature and Digital Science in 2016. The aim of the survey was to understand researcher's attitudes and experiences in working with data, sharing it and making it open; 2,000 researchers responded from a variety of countries and disciplines.

Tomado de: Open Science Monitor | European Commission - Research & Innovation

The State of Open Data, Digital Science Report (2016).
Figures have been redrawn from the originals.

RESEARCHER DATA SHARING INSIGHTS

WILEY

- Wiley's Researcher Data Insights Survey was launched earlier this year to understand how and why researchers make their research data publicly available. The study's results, highlighted below, are intended to advance the global conversation about data sharing and help Wiley better meet the needs of our researchers, authors, and partners in the rapidly evolving landscape of scientific research and communications.
- The survey was deployed in March 2014 and received more than 2,250 responses from researchers around the world.

[How and why researchers share data (and why they don't) (2014)]

GLOBAL DATA SHARING TRENDS

Data sharing practices vary widely across research fields and geographic areas. Just over half of researchers report making their data publicly available, though archiving results in repositories is not yet the norm.

WAYS DATA IS SHARED

- **67%** As supplementary material in a journal
- **37%** Personal, institutional or project webpage
- **26%** Institutional data repository *(i.e. university or institute-sponsored)*
- **19%** Discipline-specific data repository
- **6%** General-purpose data repository *(e.g. Dryad, figshare)*
- ✓ **5%** Other

Globally, researchers also report sharing their data in limited and non-permanent ways: 57% are sharing data at a conference while 42% of researchers share their data upon informal request (e.g. email, direct contact, etc.).

RESEARCHER MOTIVATIONS FOR SHARING DATA

DATA SHARING TRENDS BY COUNTRY

46% SHARING / 54% NOT SHARING

UNITED STATES
Among researchers in the US sharing their data publicly, two out of three do so because it is standard practice in the communities and because they believe it benefits the public. Similar to their counterparts in the UK, the majority of US-based researchers also share data to increase the impact or visibility of their research.

43% SHARING / 57% NOT SHARING

UNITED KINGDOM
While more than 40% of UK researchers are sharing data, only about 14% are using discipline-specific or other public repositories like Dryad and figshare. The two key drivers that motivate UK researchers to share their data are the prospect of gaining increased impact or visibility for their work and to satisfy funder requirements.

44% SHARING / 56% NOT SHARING

JAPAN
Compared with their counterparts around the world, researchers in Japan cite concerns about being scooped as a reason for not sharing data more frequently. Nearly five out of ten Japanese researchers point to this as a reason for not sharing their data, roughly double the global average.

36% SHARING / 64% NOT SHARING

CHINA
Nearly five in ten Chinese researchers say they are not sharing data because they are not required to do so by their funders or institutions. They are more likely than their global counterparts to say that they do not see data sharing as a personal responsibility and plan to take direction from funders to guide their data sharing decisions in the future.

52% SHARING / 48% NOT SHARING

BRAZIL
Two out of three researchers in Brazil say that a guarantee of proper credit or attribution would compel them to share more of their data publicly in the future.

41% SHARING / 59% NOT SHARING

AUSTRALIA
Researchers in Australia say they would be most incentivized to make their data accessible in the future to ensure preservation as well as transparency and re-use. The majority of researchers also ranked funder requirements among top reasons to share in the future.

55% SHARING / 45% NOT SHARING

GERMANY
Among German researchers sharing their data publicly, three out of four are driven to share data because they believe it will increase the visibility of their research and want to ensure public transparency and re-use. About 20% of German researchers are making use of general purpose repositories (like figshare and Dryad), significantly more than their counterparts around the world, including those in the US and UK.

REASONS WHY RESEARCHERS ARE HESITANT TO SHARE THEIR DATA

- **42%** Intellectual property or confidentiality issues
- **36%** My funder/institution does not require data sharing
- **26%** I am concerned that my research will be scooped
- **26%** I am concerned about misinterpretation or misuse
- **23%** Ethical concerns
- **22%** I am concerned about being given proper citation credit or attribution
- **21%** I did not know where to share my data
- **20%** Insufficient time and/or resources
- **16%** I did not know how to share my data
- **12%** I don't think it is my responsibility
- **12%** I did not consider the data to be relevant
- **11%** Lack of funding
- **7%** Other

DATA SHARING BY DISCIPLINE

Data sharing, specifically by way of data repositories, is most prevalent amongst life scientists, particularly those in the earth and environmental and agriculture and food sciences.

Where Health Scientists share their work:

- **68%** As supplementary material in a journal
- **29%** Personal/institutional/lab webpages
- **29%** Institutional data repositories *(i.e. university or institute-sponsored)*
- **21%** Discipline-specific data repositories
- **5%** General-purpose data repositories *(e.g. Dryad, figshare)*

A typical *Health Science researcher* says she would be motivated to share her data in the future in order to benefit the public, so long as privacy and ethical concerns are assuaged.

Where Life Scientists share their work:

- **76%** As supplementary material in a journal
- **42%** Discipline-specific data repositories
- **29%** Personal/institutional/lab webpages
- **23%** Institutional data repositories *(i.e. university or institute-sponsored)*
- **13%** General-purpose data repositories *(e.g. Dryad, figshare)*

A typical *Life Science researcher* says she would be motivated to share more of her data in the future if she was guaranteed proper credit.

Where Physical Scientists share their work:

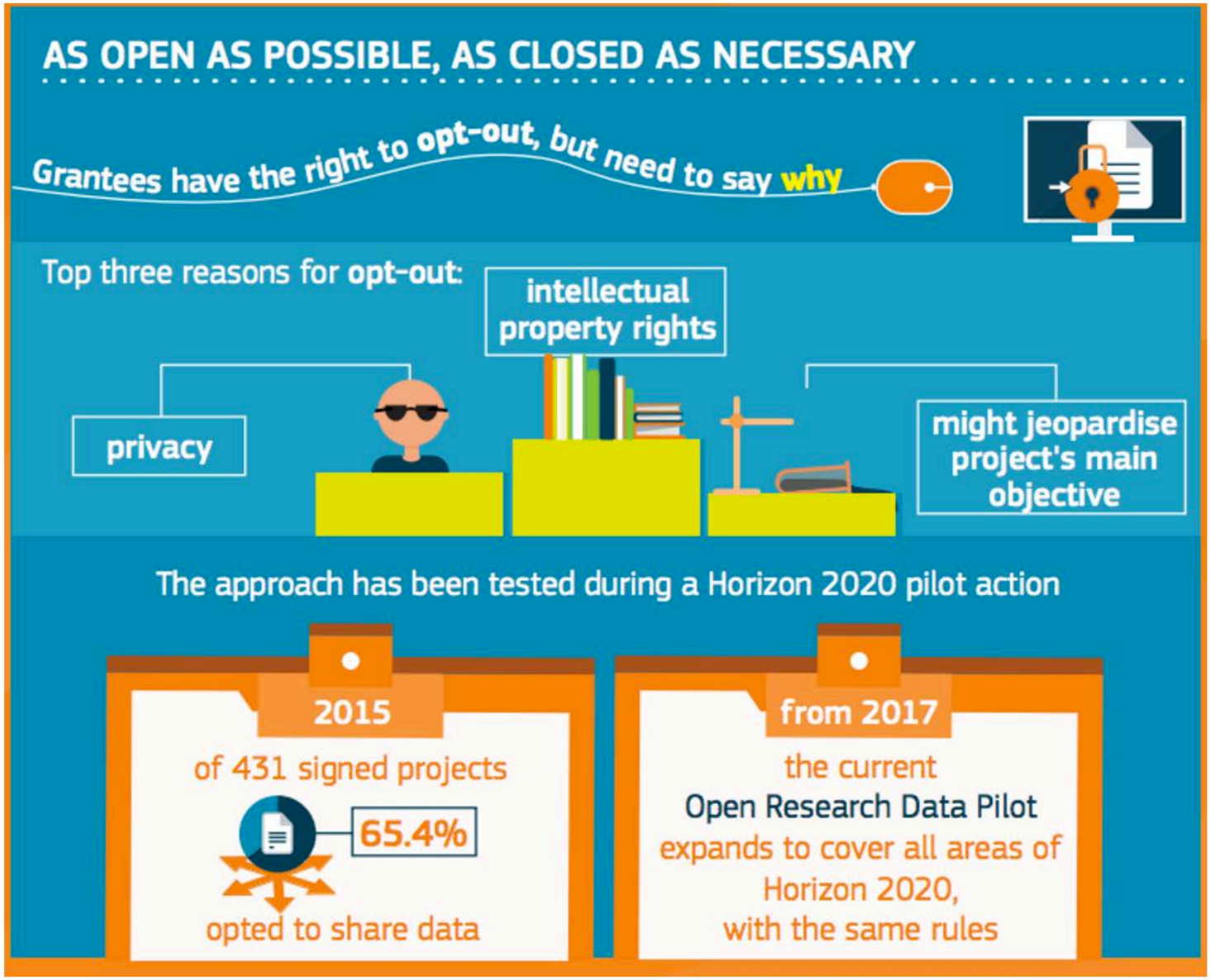
- **69%** As supplementary material in a journal
- **41%** Personal/institutional/lab webpages
- **28%** Institutional data repositories *(i.e. university or institute-sponsored)*
- **10%** Discipline-specific data repositories
- **3%** General-purpose data repositories *(e.g. Dryad, figshare)*

A typical *Physical Science researcher* says she would be motivated to share her data in the future because it is standard practice within her research community and because it increases the impact and visibility of her work.

Where Social Scientists share their work:

- **52%** As supplementary material in a journal
- **51%** Personal/institutional/lab webpages
- **25%** Institutional data repositories *(i.e. university or institute-sponsored)*
- **3%** General-purpose data repositories *(e.g. Dryad, figshare)*
- **2%** Discipline-specific data repositories

A typical *Social Science and Humanities researcher* says she would be motivated to share her data in the future if it increased the impact and visibility of her work or if she was required to by her funder.


AS OPEN AS POSSIBLE, AS CLOSED AS NECESSARY
Grantees have the right to opt-out, but need to say why
Top three reasons for opt-out:
intellectual property rights
privacy
might jeopardise project's main objective
The approach has been tested during a Horizon 2020 pilot action
2015
of 431 signed projects
65.4%
opted to share data
from 2017
the current
Open Research Data Pilot
expands to cover all areas of
Horizon 2020,
with the same rules

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Open Research Data Pilot

Open research data and data management for Horizon 2020 projects

OpenAIRE
Open Access Infrastructure for Research in Europe

European Commission

Horizon 2020
European Union funding
for Research & Innovation

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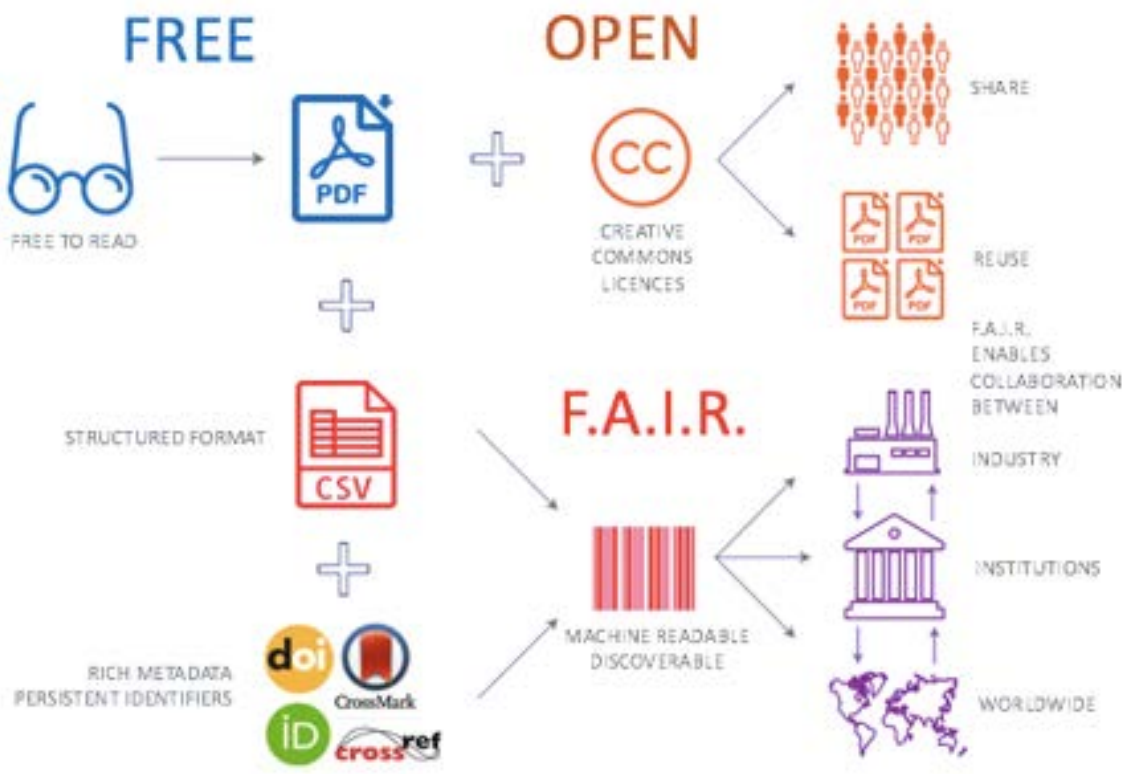
Open Research Data



[The FAIR Data Principles (Findable, Accessible, Interoperable, and Re-usable)]

Open Data

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re3data.org
REGISTRY OF RESEARCH DATA REPOSITORIES

2,000 Data Repositories and Science Europe's Framework

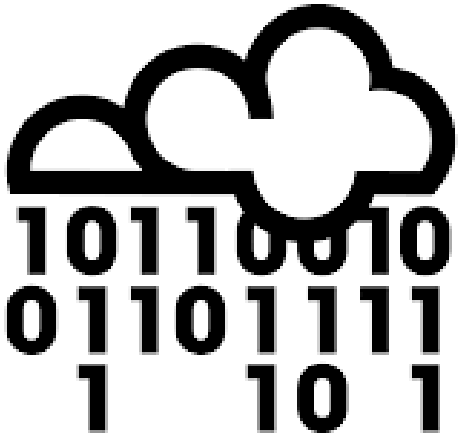
DRYAD

Repository for data underlying the international scientific and medical literature.

Open Data
REPOSITORY

Funding from NASA's CheMin group and from the University of Arizona's Department of Geosciences

Recommended Data Repositories (by Nature)



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zenodo
The place to share your research results

figshare
credit for all your research

Open Science Framework

Open Research Central
The central portal for open research publishing
IMMEDIATE PUBLICATION | OPEN DATA
OPEN PEER REVIEW | OPEN ACCESS

F1000

Wellcome Open Research
Wellcome Open Research provides all Wellcome researchers
with a place to rapidly publish any results
they think are worth sharing.

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Portal de Datos Abiertos UNAM

Colecciones Universitarias

datos.gob.mx

datamx
por CodeandoMéxico

[Open Data Innovation? Open Your Data And See It Happen.
Milena Yankova | Ontotext]

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The Open Data Song (electric version) by Sheryl's Crush

GRACIAS

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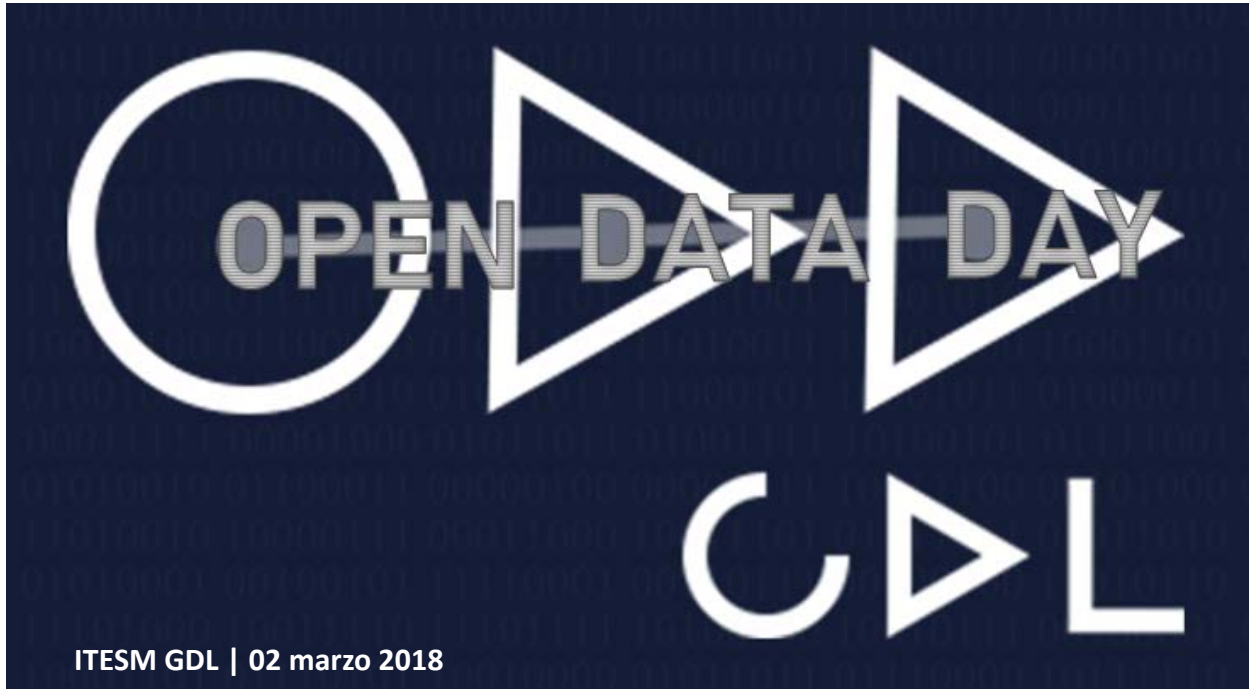
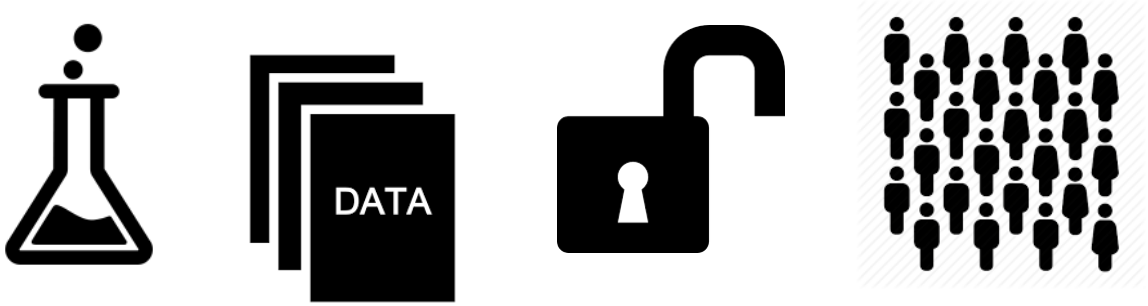


DATOS ABIERTOS DE INVESTIGACIÓN CIENCIA, INNOVACIÓN y SOCIEDAD



Martin-Adalberto Tena-Espinoza-de-los-Monteros

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PROGRAMA DE DOCTORADO FORMACIÓN EN LA SOCIEDAD DEL CONOCIMIENTO

VNiVERSiDAD D SALAMANCA CAMPUS DE EXCELENCIA INTERNACIONAL

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