

Data Analytics Center of Competence

AI, Open and Private Data for National Governments

Data Analytics Center of Competence



What is Data Equity?

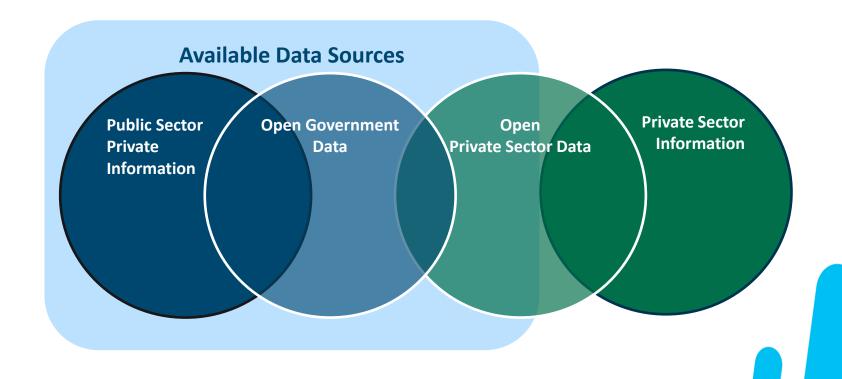
"A measure of the aggregate economic & social benefits that could be gained in the private and public sectors by unlocking the insights available from big data"*

^{* &}lt;a href="https://www.bdvc.nl/images/Rapporten/Value-of-Data-Equity-Cebr.pdf">https://www.bdvc.nl/images/Rapporten/Value-of-Data-Equity-Cebr.pdf

Data Analytics Center of Competence How to increase Data Equity



The secret? Data Conglomeration!



Data Analytics Center of Competence Why collect the data





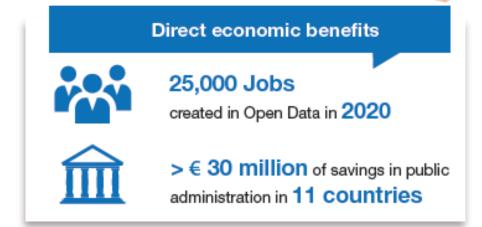
Estimated values for 2020 for the EU28+

Market size and value added	Number of jobs created	Cost savings for the public sector	Efficiency and productivity gains
€ 325 billion direct market size for the period 2016-2020 36.9% increase in share of GDP from 2016 to 2020 € 83,578 million market for public administration in 2020		€ 1.7 billion cost savings for EU28+ public administrations in 2020	7,000 lives can be saved due to quicker response 2,549 hours can be saved in terms of finding parking 629 million hours saved, equivalent to € 27.9 billion

Data Analytics Center of Competence Why collect the data







The benefits of Open Data are diverse and range from improved performance of public administrations, economic growth in the private sector to wider benefits for citizens and the society



Data Analytics Center of Competence Has anyone done this?



European Open Data Portal

28 EU Member Countries' Local Open Data Initiatives



Data Analytics Center of Competence European Data Portal



European Data Portal



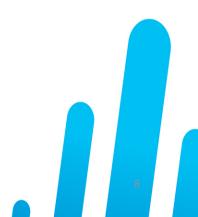
Activities in a nutshell



Data Analytics Center of Competence Has anyone done this?



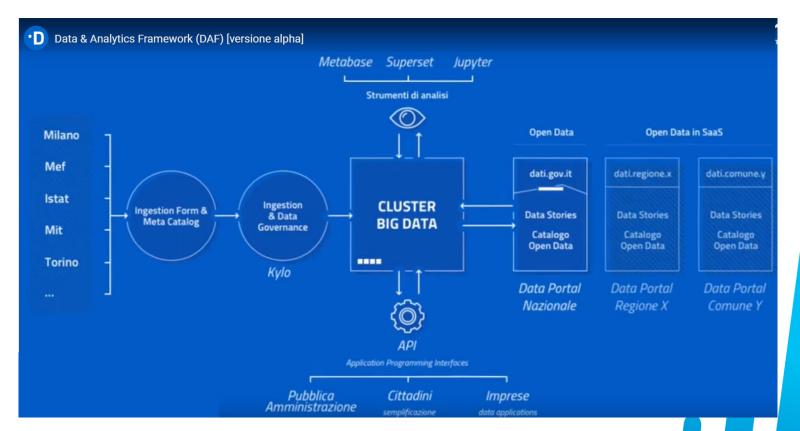
But this is just for open data! What about private data?



Data Analytics Center of Competence Italy's Data & Analytics Framework (DAF)



- Analytical tools
- Synthesize knowledge for decision makers
- Information dissemination to citizens and businesses.
- Data scientist teams within the Public Administration
- Scientific research of interest to the Public Administration



Data Analytics Center of Competence (DACC) Use Cases

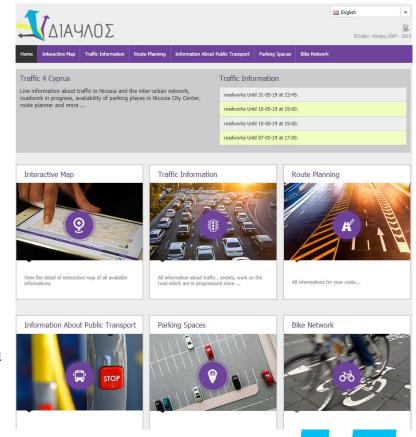


Use Case 1 - Cyprus Diavlos Project

Real Time Traffic & Parking Information in Nicosia

- Benefits:
 - Improved coordination between
 departments of public works and traffic
 police
 - Reduced traffic jams
 - Improved experience of citizens

https://www.valencia.es/ayuntamiento/atencion_ciudadano.nsf/vDocumentosTituloAux/Aplicaciones%20m%C3%B3viles?opendocument&lang=1





Use Case 2 - Spain AppValencia a mobile app that uses open data to operate

Direct Access to e-Office & Municipal Register

- Benefits:
 - Improved service to citizens
 - Avoidance of queues
 - Lower number of clerks answering questions

https://www.valencia.es/ayuntamiento/atencion_ci udadano.nsf/vDocumentosTituloAux/Aplicaciones%20 m%C3%B3viles?opendocument&lang=1



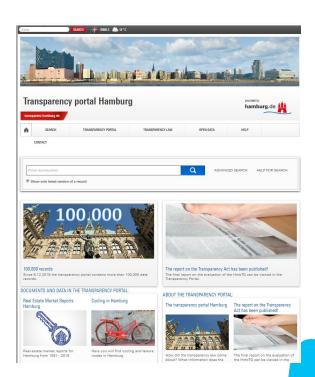


Use Case 3 - Germany City of Hamburg Replace Official Requests with Open Data

Retrieve data automatically instead of running official requests to the relevant authorities

- Benefits:
 - Reduced time to complete job
 - Reduced resources for completing job

http://transparenz.hamburg.de/





Use Case 4 - Germany City of Berlin Catchment Areas of Primary Schools

Optimized tailoring of catchment areas for elementary schools

Benefits:

- School capacity utilization
- Minimize the pupils' way to school
- Ensure socio-economic diversity of the student body

| 1 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Catchment areas in Tempelhof-Schöneberg

https://codefor.de/blog/open-dataverwaltung-grundschuleinzugsgebiete.html





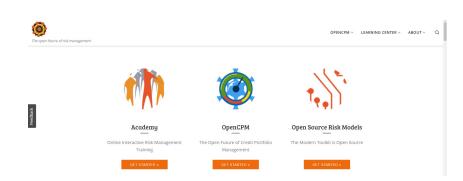
Use Case 5 - The Netherlands Financial Risk Management

Provide risk management tools to public administrators and businesses

Benefits:

- Central provider of financial risk tools & training
- Improves transparency, enhances best practices around financial risk management
- Increase financial literacy

http://www.openriskmanagement.com/







Use Case 6 - UK - London Fire Brigate Response Times Optimization Tool

View emergency response times and fire incidents per ward & optimize resources.

Benefits:

- Reduce emergency response times Save
 more lives and property
- Costs reduction by optimizing the closing or opening of fire stations

http://london-fire.labs.theodi.org/

london fire stations

Home Summary

Discover

This sitle provides tools for exploring the impact of closing different fire stations in London, based on open data. Working with Open Data Institute partner, Telefónica Dynamic Insights, has enabled us to develop a tool that also takes account of numbers of people affected by the changes.

The tools available on this site show the pattern of effects, based on two parameters:

- Fire service attendance times to incidents, from the London Fire Brigade (LFB) data, available at data gov uk
- Data relating to mobile phone activity in particular parts of London across the day, estimating the number of people present in the area, and likely to be affected at those times (crowd data)

Using just two open datasets, the maps generated by the researchers show the potential effects of shutting the 10 fire stations earmarked for closure and you can explore the results for yourself below.

Our maps allow you to analyse the potential effects at borough level of closing fire stations in London. The effects can be viewed by potential change in incident attendance time, or as a score which also takes into account the actual footfall of people in that borough. You can close stations by clicking on the station icons or use the shortcut at the top of the page to close the 10 firestations proposed for closure.



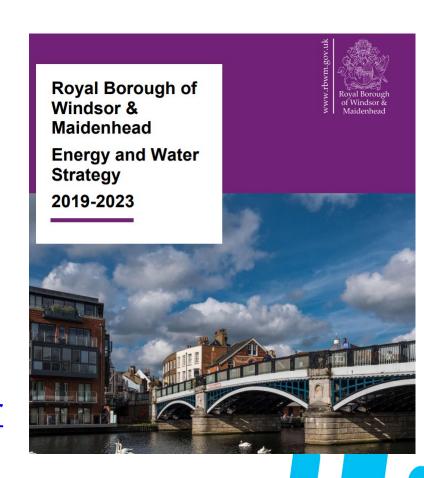


Use Case 7 - UK Windsor and Maidenhead Council
Public Building Energy Savings
Real-time data on energy use in public building

Benefits:

- Energy bills reduction by 16%
- Opened data to help citizens reduce their electricity bills at home

https://www3.rbwm.gov.uk/downl
oad/downloads/id/4437/energy_str
ategy.pdf





Use Case 8 - Lithuania/Latvia PASYFO

Forecast personal allergy symptoms

Use air quality data to predict allergy symptoms

Benefits:

- Reduce health issues for citizens
- Reduce public hospital bills

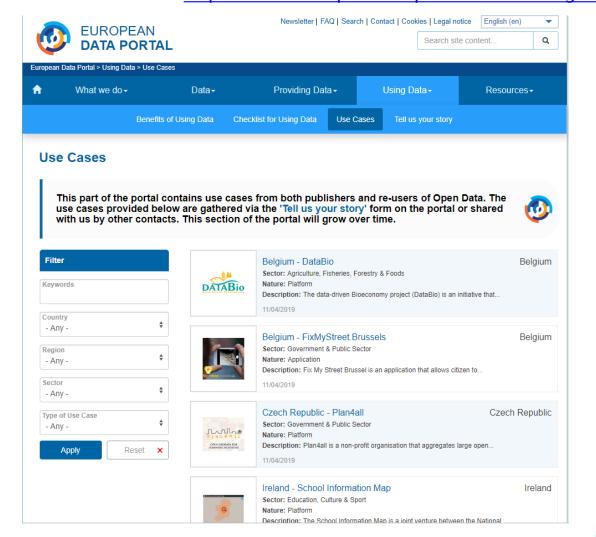
http://pasyfo.lt/en/







For more use cases: https://www.europeandataportal.eu/en/using-data/use-cases



Data Analytics Center of Competence



Public Administration A.I.& Data Framework (PAID)



Data Analytics Center of Competence PAID Framework Overview

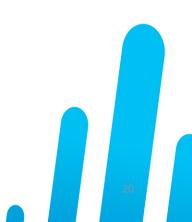


Combine Big Data and Open Data technologies with:

INTRASOFT International's expertise to produce

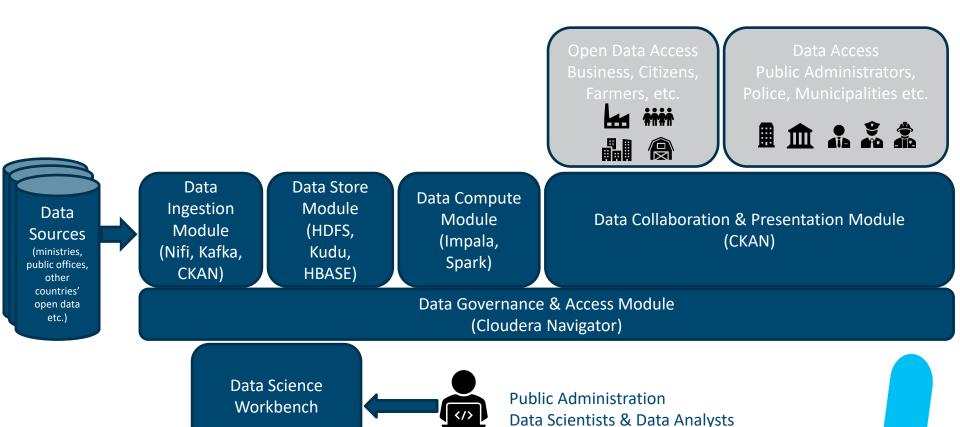
a unique big data & artificial intelligence framework

for public administrations and national governments



Data Analytics Center of Competence (DACC) PAID Framework Architecture

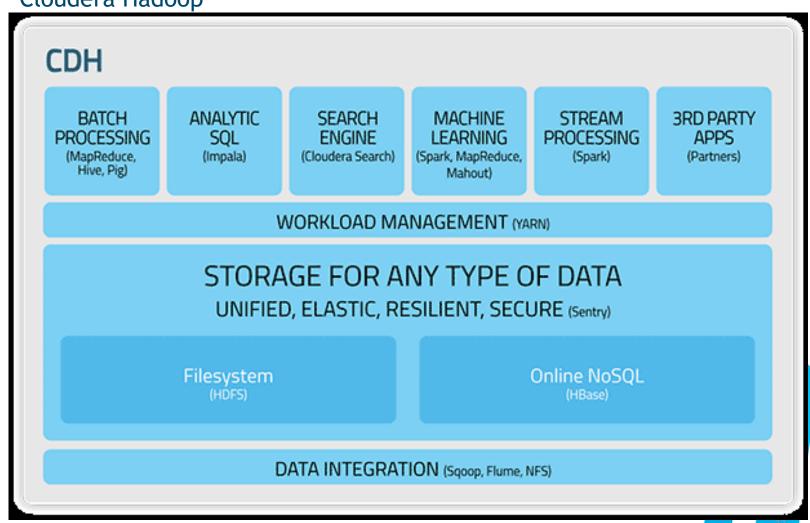




Data Analytics Center of Competence (DACC) PAID Framework Core Technologies



Cloudera Hadoop



Data Analytics Center of Competence (DACC) PAID Framework Core Technologies



CKAN: A streamlined way to make data discoverable and presentable. Features:

API - RPC-style API exposes core features to clients.

FEDERATE - Harvesting functionality for metadata from other data portals

FILESTORE - Allow users to upload data and image files.



METADATA - Rich set of metadata for each dataset.

PUBLISH AND MANAGE DATA - Intuitive web interface allows publishers and curators to easily register, update and refine datasets.

SEARCH AND DISCOVERY - Rich search experience for quick 'Google-style' keyword search as well as faceting by tags and browsing between related datasets.

VISUALIZATION - Data previewing tool has a host of powerful features for previewing data stored in the DataStore.





Thank you for your attention





