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Working with Open Data Responses [36]

Survey Questions

What's the name of the project (application, website, etc.) you developed from open data available in the EU?

Where did you get the data from? Please indicate all the sources if you can.

Did you know how to find the data? How did you find it?

How difficult / easy was it to find the data you were looking for?

How would you rate the quality of the data you found?

Did you use any software (or develop something internally) to help with data preparation (e.g. to clean or transform the data)? What did the software do?

Overall, what were the main difficulties / pain points you encountered in dealing with the data?

Is your project currently live?

Can you briefly tell us about the technologies (e.g. language, libraries, framework, etc.) used to develop your project?

What were the main difficulties / pain points you encountered when developing your project (technical issues, management issues, etc.)?

How many end users interact with your project every month on average?

What are you currently doing (or have done) to promote your project to end users?

What do you think could help to promote your project even more?

Have you received any funding for your project? If yes, who funded you?

Where did you get the data from? Please indicate all the sources if you can.

ted.europa .eu/TED/main/HomePage.do

ISTAT, EUROSTAT

ted.europa .eu, financial transparency system

Eurostat, European Commission; EEA; ECB

EU Parliament website + Twitter

eur-lex.europa .eu, publications.europa .eu

The data was not available as open data - it was leaked to us and we made it open data... source were several members of parliament.

We used the food database of the European Food Safety Authority. Data has been collected in a part of EU countries over multiple years using different surveys.

EU open data portals. You can download data from the portals as well in XML or JSON-LD format - data.europa .eu/euodp/en/data/dataset/ted-1

IATI Registry

[...]/sources, not all. Will be all in the future.

European Parliament proceedings, EUR-LEX, DGT-TM

European Central Bank

Daily xml files from the EU Transparency register. Meetings data: from individual lists of EC staff meetings with lobbyists on the EC website.

Eurostat, European Environmental Agency, CRED EM-DAT, Our World in Data, Digital Elevation Model Over Europe from the Copernicus project, Integrated Climate Data Center, National Oceanic and Atmospheric Administration

The application consist of data on lobbying published by the European Commission through it's Transparency Register (ec.europa .eu/transparencyregister/public/homePage.do) or data taken from MEP's declaration of financial interests published on the individual pages of the European Parliament website of elected members.

Eurostat, OECD, ECB, EU Commission (ECFIN), Alpha Vantage

Eurostat, European central bank, European investment bank, OCDE, World Bank, CEPII

Eurostat datasets (macroeconomic indicators on EU countries), ec.europa .eu/eurostat/home - UN Comtrade (export/import patterns), comtrade.un .org

EUR-Lex, RIS, rechtsprechung-im-internet, CURIA

Cordis, Transparency registry

data.europa .eu/euodp/en/data/dataset?q=cordis

Copernicus, EMODNET

EMODnet, NASA

Dozens of different sources, e.g. energy, radiation, weather, and air quality devices, bicycles as well as seismographs, iBeacons, vehicles, ships, aircraft and animal trackers.

Eurostat, National Institute of Statistic of Spain, European Central Bank, Ministerio de Fomento, Banco de España, European Systemic Risk Board, Euro area, THE WORLD BANK

Open Data Portal, European Environment Agency, Other open data (for instance the cars data is coming from the US gov)

Austria and Germany local repositories

Chemical hazard and regulatory data from ECHA among other authoritative sources; product ingredient lists from manufacturer labels

MEF & INPS data portal, AGCOM and AUDITEL public reports, wikidata and other PA data portal

Italian open data about public procurement published by each institutions for transparency reasons

polish corporate registry db, but it's not open data :)

ANSM, HAS, Assurance Maladie (France), EMA, Eudravigilance (EU), WHO, Wikidata

Wahl-o-Mat, EurLex

INE, Government, local and regional administrations...

Estonian open data portal: opendata.riik .ee

Did you know how to find the data? How did you find it?

I have been aware of the datasets I use for as long as I can remember. I only created [] because I believed there was more value in the data than anyone was currently extracting.

We already knew.

Was using the dataset as part of my previous work

Yes. I new about these sources from previous work.

At the beginning we decided to use data collected by ParlTrack. Then we opted for collecting data directly from the EU Parliament website. We have experience in collecting and analyzing data coming from different Parliaments and sources.

The most important parts I directly knew where they were. But other parts (document metadata) were really hard to figure out the optimal way to get them -- for me.

Personal sources

Google search

I was looking for trade data and had to search to find the datasets. I used the search bar in EU data portal website with search terms like trade.

Yes, the IATI Registry

Yes, I have more than 10 years of experience with Open Data.

We knew where it is (disregarding the fact that no website structure is static these days...).

Web search

The xml files are published on a daily basis and we have been collecting them since 2012. The meetings lists is slightly more difficult as we have to harvest the data from individual pages. Would be better of those data would also be available via one xml file updated regularly. When there are personnel changes it is sometimes hard to find the page for the successor. I expect it will be quite a job for us to accommodate the changes in the Commission later this year. A weekly xml file for all meetings data would solve this.

EU Open Data Portal, Google/Ecosia Search

Yes because I perform regular data analysis for the purpose of our research.

Our team had expert-level knowledge about economic datasets, so we knew what kind of data was available and where to find it. EU Datathon also organized some workshops about data sources, which were helpful. Stock market datasets we found through google.

On the website of the institutions (to my knowledge a lot of these data are also available in dbnomics)

Eurostat was indicated in the EU Datathon list of possible datasets. For Comtrade, we thought first to our problem definition (detecting growth potential from trade activity) and we then found Comtrade when looking for this type of data.

OpenDataPortal, OpenDataAustria, research on Google

Data.europe .eu

Not really, but google did the job, so I guess the portal has good metadata about its contents.

Yes, from web searchs and public data portals (European Open Data Portal, EmodNET, etc.)

I am an expert in marine data

Domain knowledge, 3rd party submissions and requests & searching for webpages

Yes, we knew the data were in the EU Data portals (EUROSTAT) and partners (European Bank). The links were in the EU Datathon website, so we just followed the links.

Google mostly. We didn't use much the Open Data Portal search engine

I googled for hours. I talked to people. I asked regional public authorities.

Expertise in chemical informatics

Yes, looking to public data portals

We found those data during an academic survey

Scraped

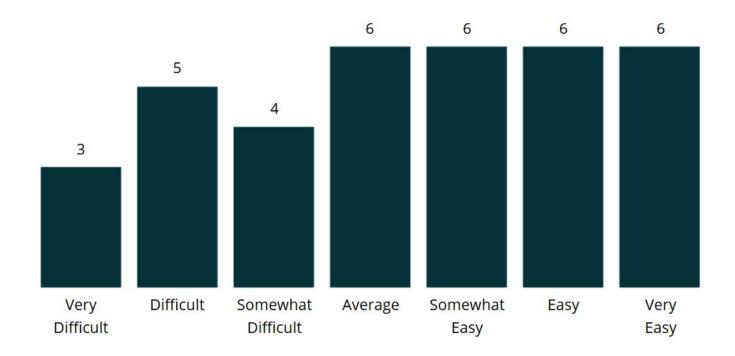
From the data portals, French and European, then by thoroughly going through each data publisher's websites. (data.gouv .fr, EU Open Data Portal and the European Data portal)

Short Google Search

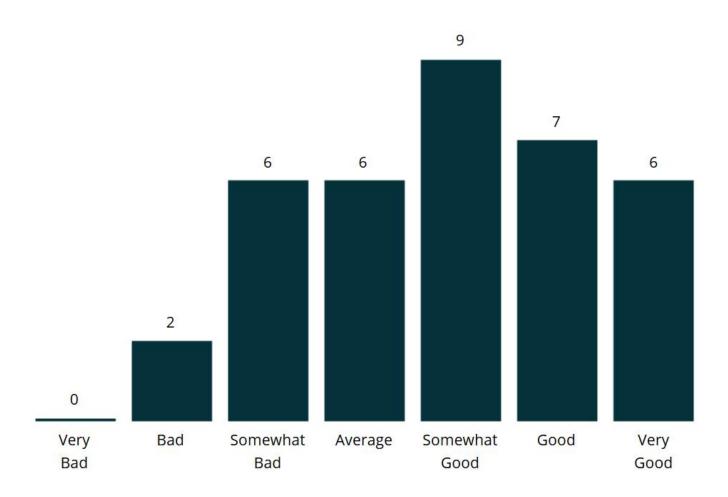
We use a wide spectrum of sources: from the National Statistics Institute to data provided by ministries, city councils or data that we get through freedom of information act requests to the transparency website. We are journalism, so sometimes we know in which web we can find the data. In other cases, we know who to call in order to get the data or get advise. If, despite all of the above, we fails in find the data, we make a Google search using certain strategies.

I was working in a ministry that was responsible for open data portal so we had knowledge

How difficult / easy was it to find the data you were looking for?



How would you rate the quality of the data you found?



Did you use any software (or develop something internally) to help with data preparation (e.g. to clean or transform the data)? What did the software do?

Turning messy data into structured data, we built dozens of internal tools. A full processing pipeline, AI systems for unifying the data, data discovery systems, etc. We mostly use .Net/MVC, C#, Jquery, SQL Server, Visual Studio, XGboost, Google Cloud Services (for auto-translation).

We cleaned and transformed the data using internal scripts in R language.

Data cleaning, extrapolation, normalisation

Yes. Developed my own software to prepare the data and turn into maps. I didn't use any libraries. Coded data treatment operations using PHP mostly as well as some JavaScript.

We developed software internally: the software is needed to collect the data from the website and to elaborate the different analysis we show. (python, nltk, scikit-learn, flask, css/html)

I wrote a rather complex document transformation programme -- using python.

We developed our own machine-learning-processing tool, additionally we developed an editor to work with the files and link sources together

The R Project for Statistical Computing.

Excel and Java

Yes, we ETL data prior to exposing it. We have developed 2 Django applications (open-source) to transform data.

Yes, we have a system to refresh the data. We are working on a new system to gather and process Open Data. We use c# (mono) and nodejs mainly. C# with VS and Nodejs with webstorm.

Yes, we have lots of internal tools for text corpus processing, most of which are open source and available from corpus .tools

Identify missing data and other checks (python).

Yes. Software to extract the data from the xml, then some cleaning and transforming and then the data is added to our database. It's all done in Python.

R, QGIS

Most of the data published on [...] is available in .pdf documents. We build internal pdf parsers to "read" the documents and collect the data in a machine-readable format (csv or json). Python

We did not use any such software, only self-developed functions (subprograms). We just used javascript for these functions. We did not do any complicated cleaning or transformations to the data. Therefore, manually written functions in javascript were sufficient.

We used R. Most specifically the packages data.table/dplyr for data manipulation, package haven for non standard format (stata format), package countrycode to deal with countries ISO. We also use shiny for the app.

Python both to retrieve and analyse the data

Cleaning, language detection, augmentation. We have developed everything internally. The main language we used was Go-lang. The major efforts went into algorithms to help us clean, transform and augment the data that was published. A major part in this setup was played by the data store we used to save and retrieve all the information. We used Facebook's RocksDB with a custom driver we wrote in Go. No external frameworks have been used for data manipulation. Mainly because no frameworks were available in Go at that time, but also, due to the incredible scale requirements, understanding and controlling each piece of the overall architecture was crucial. A framework is like a black box. We couldn't allow having black boxes in our setup :)

Python with pandas framework

Yes, we have our own operational systems getting and transforming data programmatically. Python (MOTU client, etc...)

I code in R/python, access and process the data in the cloud.

The entire [...] stack is geared towards this, e.g. normalising data, getting it into a common format, linking semantic descriptors, etc. We work primarily in golang and RoR.

YES. TRANSFORM DATA IN COMPARABLE FORMATS, FILL MISSING. We developed new software using the Python programming language in order to initially transform the raw data into a "comparable" structure across sources, and the R Statistics Software an Programming Language in order to join different data sources, visualize results or build models. For the latter, we used RStudio as IDE and R Shiny as front-end.

We only used the Python and the Spyder IDE.

We developed a custom solution that cleans and streamlines the input data from over 45 data sources. The main purpose is to remove duplicate data and find and transform to a common data format base. On our server/backend we used: Programming language: Java, Python Libraries: PostGis, Apache Commons Framework: Spring, Hibernate, Angular.JS, DataBase: PostgreSQL Our Android client: Programming language: Java Libraries: Apache Commons, Android Annotations, Android Support Libraries, Easyweather to access data from openweathermap.com Framework: Fabric, Firebase DataBase: SQLite

Various internal software tools for parsing acquired data into structure required by application database, for matching chemicals by canonical identifiers. [...] data are managed in a MS SQL RDB; the [...] website that provides product-specific health ratings was written using MS web publication tools and libraries.

Yes, we use [...] SDaaS (Smart Data as a Service) to translate raw data in RDF, cleanup, store data in a knowledge graph and query it with SPARQL. (W3C Standards: Sparql query 1.1, Sparql update 1.1, RDF 1.1.). (bash, php, c, javascript)

We internally develop some custom pipelines to ETL the data. (node.js, python, C++. Libraries: request and crypto (node), pandas and numpy (python)).

Scraping, extracting text & data from pdfs, structuring, indexing. It's our internal solution written from scratch incorporating some elements. An app in PHP + MariaDB + FTS and aggregations in ElasticSearch + Redis + S3 / hard-disk storage + Tesseract + pdf2html.

I developed the data preparation tools myself. Cleaning, validation, conversions, with fuzzy string matching techniques. Mainly Python, with no particular libraries or framework: Beautifulsoup for Html parsing, pyLuigi for the automation of some parts, Json. A bit of Google Data Studio to visualize the whole data as well

Python script, the way it accesses the data

The statistical software R

Yes I used R

Overall, what were the main difficulties / pain points you encountered in dealing with the data?

Turning unstructured data into structured data

Joining the different kinds of data

Inconsistent data

Some datasets were incomplete. Occasional errors were found. Also a question of turning the data into a relevant metric.

The data on the European Parliament's website are poorly standardised and the format has changed during the legislature.

Different standards and conventions, depending on the time of creation.

It was not structured and it was not complete.

We have created a new classification based on the Belgium Food pyramid. Mapping this classification on the FoodEx1 classification used in the consumption database, required us to make assumptions. This is caused by the fact we could not allocate all categories of the new 'Food Pyramid classification' to the FoodEx1 classification. For example, the Food Pyramid Classification makes a difference between coffee with and without sugar, soups with more or less than 5 grams of salt per liter, while FoodEx1 does not make such distinction explicitly. We used average consumption. We did not have the survey results from individuals. Circumstances can influence individual consumption a lot. Too much salty food for example may be bad for people with high blood pressure. But salt intake must be higher for people who sport and sweat a lot, when it is hot weather, or for people with lower blood pressure. Genetic and cultural differences and habits may also influence food intake.

There is no commonality

None

Meetings data was most messy. In the beginning (2014) this was not linked consistently to registrants/register-IDs. We also haven't found a way to import the export group data which are shown on the EU TR website. We would like to add information about sector (eg NACE codes) under which registrants fall. This is not feasible for us to do ourselves, but it would provide a lot of added value if registrants were asked to choose one or more NACE codes for their organisation. I have more ideas. So far, it has proven difficult to provide input for improvements to the EU TR secretariat (and to get concrete results out of that)

Relate the data with the geospatial structures, very fragmented data, very different structure in each source.

I guess the size, but that is also the main benefit!

The metadata are not easy to get and process

Difficult to find the right (type of) data in the crammed EU Open Data Portal and the data portal of other EU organizations, sometimes lack of documentation, sometimes not so recent data, sometimes hard to

combine different data sources due to inconsistencies, different granularities or different periods covered

The lack of open data formats renders it's access extremely difficult without deploying costly scrapping & parsing tools.

Once we knew what data we wanted, it was not a big problem to find it. However, it can be hard to know what kind of data is available without expert-level knowledge of the subject matter. Also, expertise is needed to understand what the data mean.

Parsing data (each provider has its standard). Missing values (we could not discard them so we did imputations using random forests).

- Aggregating to different level of granularity (regional to national, sector to macrosector).
- ISO norms for countries (different standards: Eurostat does not comply with ISO alpha 2).
- Conversion between format wide and long

Getting all the data we needed through the API designed by Comtrade

The quality of the data (missing values) and text coding issues within data and PDFs.

Open text fields with unstructured information, wrong data, factual discrepancies (ex. Postal code and cities)

Missing information that we needed, in our case the URLs from research and development project websites

Data formats. Heterogeneity. Size. Naming.

The difficulty is to access the data remotely thanks Web services/APIs

Apart from the obvious difficulty of dealing with hundreds of different formats/protocols (which are understandable) the biggest issue was reliability over time, and consistency in update rates: after spending a lot of time building a fetcher for a data resource to ingest into [...] we had no confidence that the data would necessarily continue to be available in the future (or be updated at a similar rate).

THE METADATA

Finding the data and downloading it. The data is not sufficiently referenced with tags and other. The main name of the dataset is, most of the time, not what you want. But maybe that dataset has the data that you need, and therefore you should know it without opening it.

Main pain points are that public authorities do not want to provide data even if they were legally obliged to.

Managing complexities of regulatory chemical identification and conditional restrictions

AGCOM does not export data in a open format (just PDF), INPS data are not updated, sometime we need data that are not available with an open license (i.e. AUDITEL)

Data quality and the absence of others correlate data (currently not in open data)

Interesting data is not opened

Scarce documentation. Mainly because each data publishers know their own domains very well, and omit some key piece of information

Figure out how the API works

Incomplete and messy data

Data quality and lack of metadata

Is your project currently live?



Can you briefly tell us about the technologies (e.g. language, libraries, framework, etc.) used to develop your project?

Windows Server, SQL Server, C#, Visual Studio, R, XGboost , python, node.js, Google Cloud Services

We prepared the data with R and prepared the interface with Tableau.

Python

Used standard web-based technologies (mostly PHP) to create a web App that is linked to a Twitter profile. The web App is built using HTML, CSS, JavaScript (front end), PHP (back end / server) and MySQL (database). jQuery library also used on the front end. Everything else was custom-built.

Python, nltk, scikit-learn, flask, css/html

Python (Flask), elasticsearch, RDF, REST, NLP. The code base is split into two parts: One for data extraction, transformation, and uploading (ETL-part); and one for hosting the transformed documents (Hosting part). The ETL-Part is written in Python. It has a relational database (mySQL) for managing which documents have been loaded, where was an error and so on. The transformation part makes heavily use of Python's xml-Library called lxml. For the recognition of definitions, technical terms, and references I use Natural-Language-Processing concepts (Tokenization, Tagging, ...), using Pythons library nltk. The Host Part uses Elasticsearch for storing and indexing the transformed documents. The Web-application is written in Python using Flask.

R + iframes

Java and Android Studio

Python, ReactJS

C# for the process, web and API. Sqlite, mongodb and SSDB. Python to download Wikipedia and nodejs in small scripts.

A proprietary backend dedicated for searching large amounts of text (SQL not suitable here). That is C/C++/Python. A JS frontend.

Python, pandasdmx, numpy, statistical libraries, JavaScript frameworks (d3) Etc

C++, Python, Drupal

Vue JS, Leaflet, OpenStreetMaps, R, QGIS

[...] use an open source data-visualisation program d3.js to make complex data-sets accessible to a wider-audience. PYTHON scripts are used to parse information from the data-sets themselves. 1) For the whole [...] application:

- Vue.js framework

- jQuery

- Bootstrap (layout and navbar)

2) For the charts:

- d3.js

- dc.js

- crossfilter.js

Javascript, HTML, CSS. DigitalOcean cloud server.

We use R along with shiny for app. For the others package used we use ggplot2 for dataviz along with leaflet for map rendering. Version control using git.

Python for the download and the analysis of the data. GoHugo, HTML and CSS to design the website. FNAlab to deliver the interactive network visualization.

Framework for citation recognition and URL-matching by [...] (own solution); Python, d3js, HTML5 canvas

Custom build knowledge parsing and graph software written in Go and powered by Facebook's Rocks DB.

Python, pandas, scikit-learn, heritrix crawler

Web App = VueJS + Leaflet + .NET. Operationals and Tools = Python + Flask

Python/R

Dozens.... [...] is a full stack web service, built on Golang, ruby on rails, postgres, Neo4j, etc.

Shiny, R, Python

Aurora SQL, AWS Lambda, Cognito Identity management, Power BI

Java Spring PostgreSQL, PostGIS Android, iOS, Windows Phone Angular, HTML, CSS Alexa Platform Jira, Confluence, GitHub

Was not responsible for programming of application; non-SQL databases used for managing chemical and product data

Data are managed with Semantic Web technologies, using [...] SDaaS platform to ingest an link data. The graphical presentation and UEX was developed using our tool [...] based on vue and Javascript.

node.js & javascript \ postgres & elasticsearch

Cake PHP

Angular, Material design, nodejs, graphQL, JSON hyper-schema, MongoDB, MySQL, PostgreSQL, Python

Python, PHP, Native React

D3.js for visualization

I used R (dplyr, ggplot, shinydashboard)

What were the main difficulties / pain points you encountered when developing your project (technical issues, management issues, etc.)?

Aligning product with market needs

Managing different languages; another point was that different jobs have really different level of deepening in the data.

Typical problems every startup faces

Difficulties weren't so much technical. Rather, the challenge was to define the project scope and set the standards that would be applied.

Since the project is self-financed, we decided to update it sporadically and not on a daily basis as would be useful to do. The main problem we have encountered is, however, a lack of general interest in the subject, even among the very people involved in the analyses. From a technical point of view, for us the biggest obstacle was that of the graphic/front end, not having particular skills in this field.

Marketing (is not my strong suit)

It was a completely free project without funding - so we had to do it in our spare time.

European Food Safety Authority makes the data public, yet when we informed them about our plans to compare data between EU countries they told us better not to do so, since the data isn't standardized across the EU. So, we sensed resistance to really make public use of the data. Furthermore, we needed consent from the [...] to apply their model.

Data interpretation using Java

Building software is a pain :-p

Organize the data in common structure. In some cases, process to download data in dump.

We provide about 300TB of text data for online search...so far to the difficulties you can get :)

Large volume of data not easy to work with

Upgrading our system after changes in the EU TR proved quite an effort (and expensive). At the start (in 2012/2013) it took us a long time to build the ETL software to get the data. Once we had that in place and we had our database, presenting the data on our website was much easier. Recently, GDPR issues have been some concern, as there are some privacy-sensitive data in the EU TR (like home addresses of individual) and it is very hard to sift those out in an automated process.

Data, story/content, relevance for target group

On a technical level, using pdf parsers is always a risky solution. We noticed missing or factually incorrect data appearing on the tool, needing constant verification and adaption to ensure that the tool works as intended. No issues were found in terms of the management of the project.

No major difficulties in this part.

Imputing to less disaggregated macrosector/nuts when the data was missing. Lack of proper structure to deploy the app internally (had to use Amazon EC2). Management clueless about project management (thinks pressuring is a good method, don't understand what is costly/cheap to do)

We needed to build from scratch an expertise in web design, and that was the most difficult technical issue we had to face

Dealing with data inconsistencies, unifying data sources and scale

Nothing relevant

Processing time (we have tools that use large amount of data, so that can take time to download). Data visualization from heterogeneous sources.

I have had to set a mapserver's WCS supporting time dimension

Deciding (or proving) the value of the data available through the [...] service.

Time constraints

Having the time to work on it as we are all professionals and have business priorities

We fully develop our solution in our spare time and live in 3 different places: Vienna (Austria), Linz (Austria), Padua (Italy). We often need contact to clients and data providers all over Europe (the world) which is hard to establish.

Since goal of application is to provide consumers with science-based guidance about the health hazards of formulated products, main challenge was determining how to present chemical risk information in an understandable and actionable way. Additional challenges in determining best options for getting consumers data at point of purchase (mobile phone delivery, product bar code scanning)

Create a real open source community. Many ask no few contributes

Was hard to understand the needs of possible customers

Maintenance of the project

Missing or incomplete information. The data is generally not well structured. + A crazy amount of work.

Time is always difficult with deadline

Technical issues (I mean all the difficulties to develop the database, the tool to create graphics from data and other technical aspect of the project like the tool to extract data from the INE API.

Quality of data, technical part was easy

How many end users interact with your project every month on average? How many end users interacted with your project every month on average?

4000

I don't know.

N/A

Just started. Stats in progress.

150-200

100

We didn't track that

Hard to say as the project is not live anymore

Overall we guess 100+ per day. We do not have access to all these statistics seeing they are client data.

100

About 20.000

10,000

The last three months we had over 15,000 unique visitors per month. Visitor numbers have been on the increase since we started [...].

We just recently launched an MVP, so we don't have data to answer such questions yet

We have on average about 50 end-users per day.

Not many yet, because we just launched a few days ago. We need to see how much interest it generates.

Project has not been opened to other users yet.

We are online since less than two weeks and we got 100 users so far

No data so far

We targeted b2b and we had on average 3 PoC running. In terms of end users in the last 1 year we observed around 10 users per day

Don't know, I don't have detailed information about how many users are browsing web archived resources preserved with the project.

Not public information

Unknown

8000 (Android, iOS, Websites)

Several hundred thousand monthly active users

I don't know, depends on the period, we had a pick on more than 50K during the last Italian Financial budget presentation.

~500

700,000 unique users

2000

The graphics of [...] are embedded in more than 500 webs right now. On average, the website registered over a million page views per month

Around 20 users per day, but also number of users was very volatile

What are you planning to do to promote your project to end users? What are you currently doing (or have done) to promote your project to end users? What did you do to promote your project to end users?

SEO and PPC

Just presented it on the social. For us, it was an experiment.

Just LinkedIn and a free monthly newsletter to subscribed users

Piloted a Twitter campaign. Preparing a new and bigger one.

We promoted it:

- on social channels
- contacting stakeholders in Brussels
- publishing several analysis on important media outlets (e.g. La Stampa, Ansa, Eunews...)
- developing a partnership with Radio Radicale
- attending dedicated events in Brussels

Nothing yet.

We ended up being reported about in all media - tagesschau, zdf, new york times, sz, etc.

We are involved in the FoodWatch project in the UAE.

Presented in EU Datathon 2018 and ran a bunch of social media posts.

Nothing

At the moment nothing.

Online marketing as well as going to conferences and sponsoring events etc.

Promotion is via SEO and social media

Not that much actually. Some promotion on Twitter. We mention [...] as a source of data in our reports at [...] and [...], the two organisations behind [...].

Friends and family for now, EU Datathon on June 13, then social media, network, partnerships etc.

[...] has been mentioned in over 1000 media articles, with regular analysis performed by our staff based on the data made available to the public. Regular outreach activities are also organised to target specific type of users: journalists, cso's & academics.

EU Datathon conference and twitter.

Meeting points with other direction to show the results.

We are pushing it through blog posts and social networks

Social Media (linkedin, twitter, facebook) + PR, showing demo on conferences/meetups etc

No need for active promotion. We never had issues with finding companies and users as clients. Scaling our project was the bottleneck

Presentations, Conference Paper and Blog Posts

EUDatathon (nothing else)

I do it for fun to demonstrate to interest of having access to open data and to process on the cloud. It is a proof-of-concept

We tweet occasionally. What we do most is call people up and talk to them, have meeting, describe, discuss, demo in person.

Make app available in the university server

We do not know yet

Add the availability to share content from within our apps. Allow free integration of parts of our data as image to anybody's website. Provide an API to allow developers to integrate our data into their systems. Regular social media posts. Google ads. Facebook ads. General SEO

No active marketing; organic press coverage and google search are primary sources of new users. Standard SEO because most traffic occurs as a result of google search, but limited by a lack of resources

More or less nothing. The [...] association is doing this. We plan to go to the market.

Offline promotion with a commercial network, online with SEO and social

It self promotes

SEO only

Ask Organizations for help

We publish our graphic and data in the news feed of Spanish news agency Europa Press

Link to application was shared on homepage and application was shown on regular meetings. But not much more promotion was made.

What do you think could help to promote your project even more? What do you think could have helped your project to be more successful?

Automatic or semi-automatic Data-to-Content services

Creating a real mobile app.

Consistent marketing strategy

A good project promotes itself through word-of-mouth. Doesn't hurt to have "mouths many people listen to" to promote the project more widely.

With the new legislature, we are thinking of completely changing the purpose and appearance of the project. On the basis of these new objectives, we will restart promoting it and exploring the interest in a service that allows the work of the European Parliament to be navigated in a more effective and useful manner. We are also looking for sources of funding (so far unsuccessful) and possible partnerships to build a larger and more meaningful project.

Getting back-links.

Funding.

More concrete development with end user involvement

Journalism layer

I must do direct marketing

If only we knew.

Dedicated staff to put time in improving and promoting [...].

Contacts in the education sector, platform with massive reach in our target group

Adding additional data to the platform. Several major updates are planned all to way to the end of 2020 which will most likely result in an increased interest in the project.

Mentors from the relevant EU organizations. They could guide in choosing the relevant development directions (greatest need and interest) and thereafter help in promotion.

Maybe packaging the solution into R packages or communication from our institution

Some dedicated channel for new startup activities.

Find renowned testimonials

In our case we underestimated the infrastructure costs that were associated with maintaining such an innovative project.

Establishing permanent partnerships with communication media to promote our new activities and with education institutions to include web preservation in their pedagogical programs.

I don't know because promotion it's not my job.

More real world implementations

Funded project to improve and disseminate

International visibility of our system to local flood authorities since [...] is the first and only transnational flood information and warning system.

Advertising

I don't know.

A better online communication

We are investing now more in building partnerships with companies using data from our service, polishing API. Also working on SEO for search engines.

Split it into several apps for targeted audiences

We are working in improve SEO strategy and, in a near future, we like that our marketing department spend more time in promote the site. Hopefully, that works.

Make it more user-friendly

Have you received any funding for your project? If yes, who funded you?

No, we are self-funded from customer revenue

No. No No. No.

No

This EU Open Data project was done with our own private funding, to use it as a demonstrator for our skillset.

No

Dutch Ministry of Foreign affairs

No

Over the 15 years we took part 3 different research projects within the scope of FP7 and H2020 funding.

EU funding as part of the FIWARE open data accelerator

Not recently. The past two years it was mainly running costs (below 2000 euros/year) which we covered from [...] general budget

Nope

The project is funded by the European Commission, Open Society Foundations and King Baudouin Foundation.

No

No funding

We won the 1st prize in our challenge at the EU Datathon 2019

Only for [...] (not for this specific project): AT:net (FFG, BKA) = Austrian Research Promotion Agency; WKO go-international by Austrian Economic Chambers;

Our investors are Wayra and Neulogy Ventures

No funding

Its not a single project. Several sources. Public National and international. Not private.

No

We have had funding for [...] projects from a number of private and public sources including ODINE and InnovateUK

No

No, except time (which is considered as an investment) from our company

Yes, we received a funding from the EU through the Austrian Funding Agency (FFG)

Project was initiated as a venture-backed start-up, which was sold to UL, a global safety science provider. Funding has steadily diminished as project does not generate significant revenue and consumers are unwilling to pay for subscription information

No, all project was developed by [...] people using [...] infrastructures as a voluntary civic hacking activity

Private fund

Yes, omidyar network, google dni

No (besides a 5000 prize money for Eu Datathon 2018)

No

Yes, from Google Digital News Initiative

No